CONTENTS

The information included in this book is subject to change without notice resulting from technical developments and product improvements.

⚠ *Specifications which provide more details for the proper and safe use of the described product are available upon request.*

Introduction

Since its outset in 1935, in the wake of the invention of ferrite, TDK has aimed to develop its world leading electronic technology in both material development and production. This accumulated expertise in fine structural control technology has resulted in high performance ferrite components. These components have recently been in greater demand for electronic equipment requiring reduction in size and weight.

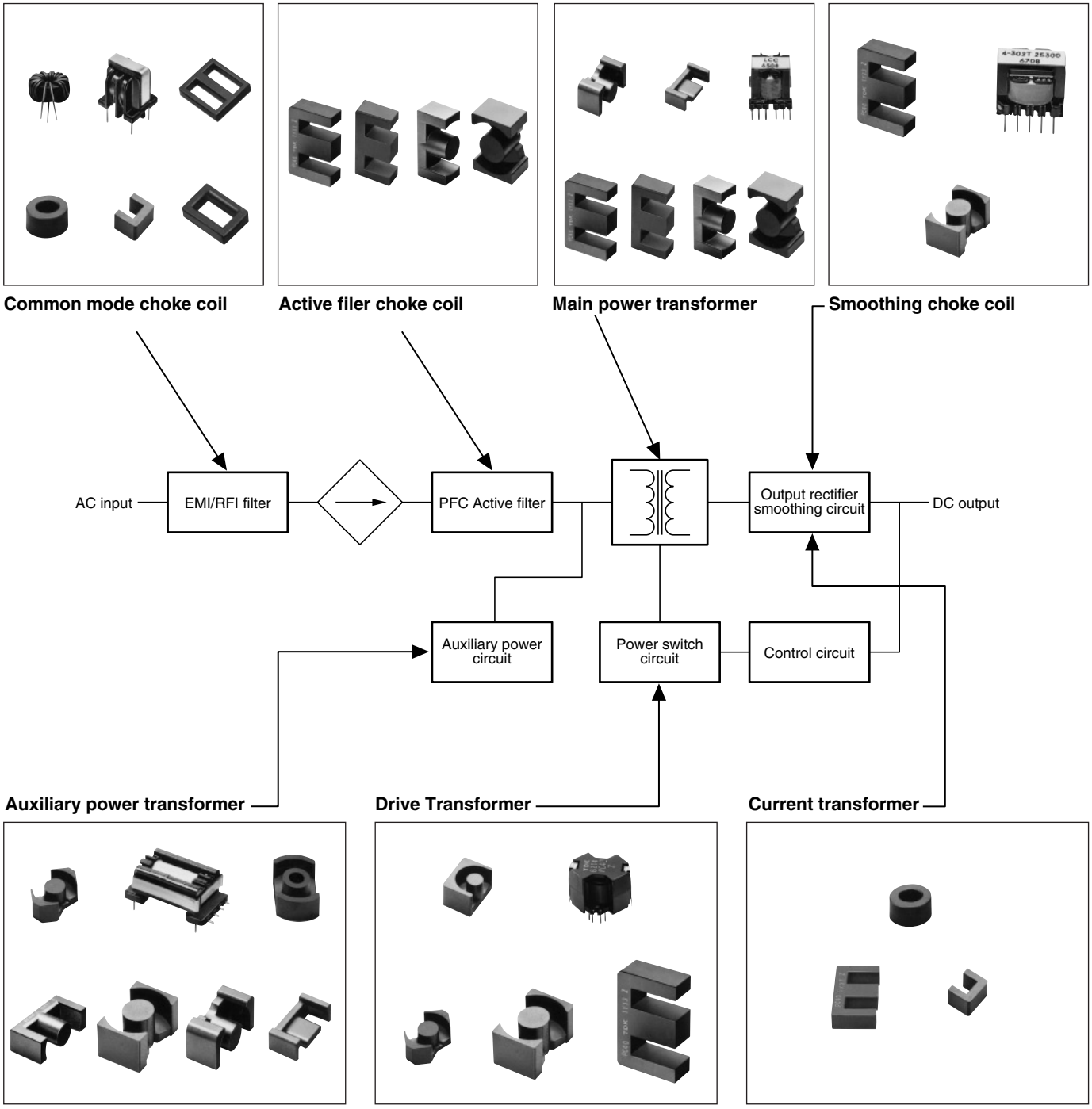
TDK Ferrite Division engineers have successfully explored every avenue of high performance ferrites, aiming to produce self-contained energy sources for microelectronic equipment.
To this end, TDK has developed high frequency power ferrite, such as PC33,PC40,PC44,PC45,PC46,PC47 and PC50 that are identifiable by their excellent magnetic characteristics. It is these high reliability ferrite
components that have largely contributed to reducing the size of switching power supplies and DC to DC Converters for micro-electronic equipment.

Other TDK endeavors deserving mention are ferrite for EMI filters and common mode chokes with excellent frequency characteristics. Not only have TDK's researchers overcome the theoretical limiting value of the high μ material's operating frequency, but they have also succeeded in developing a new material HS72 and HS10 those are characterized by its high impedance at high frequencies.

In order for you to take full advantage of these and other materials shown in this booklet, TDK has developed a range of cores and accessories to meet the need for miniature high performance switching power supplies and DC to DC Converters. TDK offers a comprehensive range of materials and core shapes to meet all of your power requirements.

TDK Ferrite Cores in Switching Power Supplies

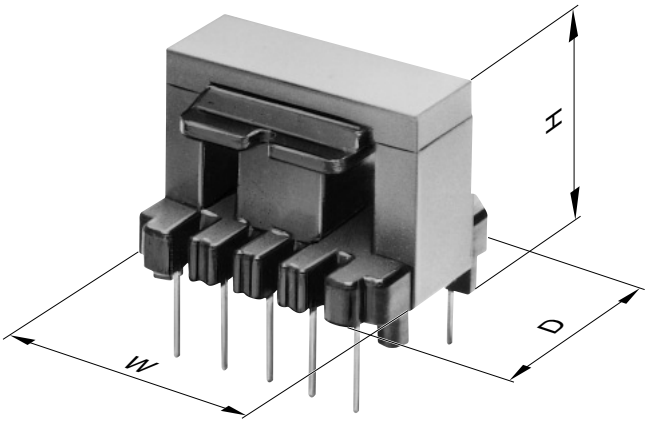
(Single forward converter)

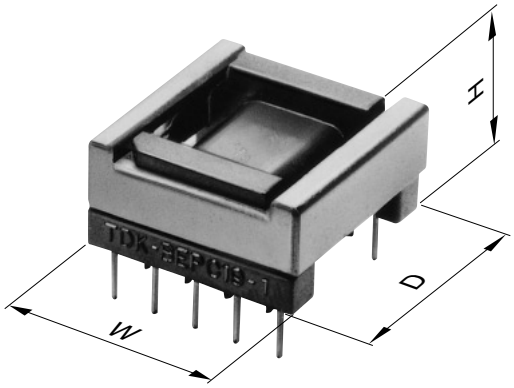


Notes:
- LP and EPC cores are ideal for use in thin transformers.
- LP cores are available in .5 and .7 inches in height (when mounted).
- EP cores are available in .5 and .65 inches in height (when mounted).

Selected Items of Legend

$\mathbf{C_1 = \Sigma \frac{\ell}{A}}$	Core constant mm^{-1}
Ae	Effective cross-sectional area, mm^2
ℓe	Effective magnetic path length, mm
Ve	Effective core volume mm^3
Acp	Cross-sectional center leg/pole area, mm^2
Acp min.	Minimum cross-sectional center pole area, mm^2
Acw	Cross-sectional winding area of core, mm^2
Aw	Cross-sectional winding area of bobbin, mm^2
ℓw	Average length of turns around bobbin, mm
t	Minimum thickness of bobbin inside which core is placed, including flanges, mm
W	Bobbin-core assembly dimensions
D	Bobbin-core assembly dimensions
H	Bobbin-core assembly dimensions





Material Characteristics

Table 1

MATERIAL CHARACTERISTICS(for Transformer and Choke)

Material					**PC40**	**PC44**	**PC47**	**PC50**
Initial permeability	μi				2300±25%	2400±25%	2500±25%	1400±25%
Amplitude permeability	μa				3000 min.	3000 min.		
Core loss volume density (Core loss)* [B=200mT]	Pcv	kW/m³	25kHz sine wave	25°C	120			
				60°C	80			
				100°C	70			
				120°C	85			
			100kHz sine wave	25°C	600	600	600	130**
				60°C	450	400	400	80**
				100°C	410	300	250	80**
				120°C	500	380	360	110**
Saturation magnetic flux density* [H=1194A/m]	Bs	mT		25°C	510	510	530	470
				60°C	450	450	480	440
				100°C	390	390	420	380
				120°C	350	350	390	350
Remanent flux density*	Br	mT		25°C	95	110	180	140
				60°C	65	70	100	110
				100°C	55	60	60	98
				120°C	50	55	60	100
Coercive force*	Hc	A/m		25°C	14.3	13	13	36.5
				60°C	10.3	9	9	31.0
				100°C	8.8	6.5	6	27.2
				120°C	8	6	7	26.0
Curie temperature	Tc	°C			>215	>215	>230	>240
Density*	db	kg/m³			4.8×10^3	4.8×10^3	4.9×10^3	4.8×10^3
Electrical resistivity*	ρv	Ω • m			6.5	6.5	4.0	30

* *Average value*

** *500kHz, 50mT*

Material					**PC45**	**PC46**	**PC33**
Initial permeability	μi				2500±25%	3200±25%	1400±25%
Amplitude permeability	μa						
Core loss volume density (Core loss)* [B=200mT]	Pcv	kW/m³	25kHz sine wave	25°C			
				60°C			
				100°C			
				120°C			
			100kHz sine wave	25°C	570	350	1100
				60°C	250(75°C)	250(45°C)	800
				100°C	460	660	600
				120°C	650	760	680
Saturation magnetic flux density* [H=1194A/m]	Bs	mT		25°C	530	520	520
				60°C	480	470	490
				100°C	420	410	440
				120°C	390	380	420
Remanent flux density*	Br	mT		25°C	120	80	220
				60°C	80	80	150
				100°C	80	130	100
				120°C	110	140	100
Coercive force*	Hc	A/m		25°C	12	10	23
				60°C	9	9	17
				100°C	8	10	14
				120°C	9	9	14
Curie temperature	Tc	°C			>230	>230	>290
Density*	db	kg/m³			4.8	4.8	4.8
Electrical resistivity*	ρv	Ω • m			3.0	3.0	2.5

* *Average value*

Material Characteristics

Table 2

MATERIAL CHARACTERISTICS(for Common mode Choke)

Material				HS52	HS72	HS10
Initial permeability	μi			5500±25%	7500±25% (2000min. at 500kHz)	10000±25%
Relative loss factor*	tanδ/μi	$\times10^{-6}$		10(100kHz)	30(100kHz)	30(100kHz)
Saturation magnetic flux density* [H=1194A/m]	Bs	mT	25°C	410	410	380
Remanent flux density*	Br	mT	25°C	70	80	120
Coercive force*	Hc	A/m	25°C	6	6	5
Curie temperature	Tc	°C		>130	>130	>120
Density*	db	kg/m³		4.9×10^3	4.9×10^3	4.9×10^3
Electrical resistivity*	ρv	Ω • m		1	0.2	0.2

* *Average value*

MATERIAL CHARACTERISTICS(for Telecommunication)

Material				H5A	H5B2	H5C2	H5C3
Initial permeability	μi			$3300^{+40\%}_{-0\%}$	7500±25%	10000±30%	15000±30%
Relative loss factor	tanδ/μi	$\times10^{-6}$		<2.5(10kHz) <10(100kHz)	<6.5(10kHz)	<7.0(10kHz)	<7.0(10kHz)
Temperature factor of initial permeability	αμir	$\times10^{-6}$	–30 to +20°C 0 to 20°C 20 to 70°C	–0.5 to 2.0 –0.5 to 2.0	0 to 1.8 0 to 1.8	–0.5 to 1.5 –0.5 to 1.5	–0.5 to 1.5 –0.5 to 1.5
Saturation magnetic flux density* [H=1194A/m]	Bs	mT	25°C	410	420	400	360
Remanent flux density*	Br	mT	25°C	100	40	90	105
Coercive force*	Hc	A/m	25°C	8.0	5.6	7.2	4.4
Curie temperature	Tc	°C		>130	>130	>120	>105
Hysteresis material constant	η_B	$\frac{10^{-6}}{mT}$		<0.8	<1.0	<1.4	<0.5
Disaccommodation factor	D_F	$\times10^{-6}$		<3	<3	<2	<2
Density*	db	kg/m³		4.8×10^3	4.9×10^3	4.9×10^3	4.95×10^3
Electrical resistivity*	ρv	Ω • m		1	0.1	0.15	0.15

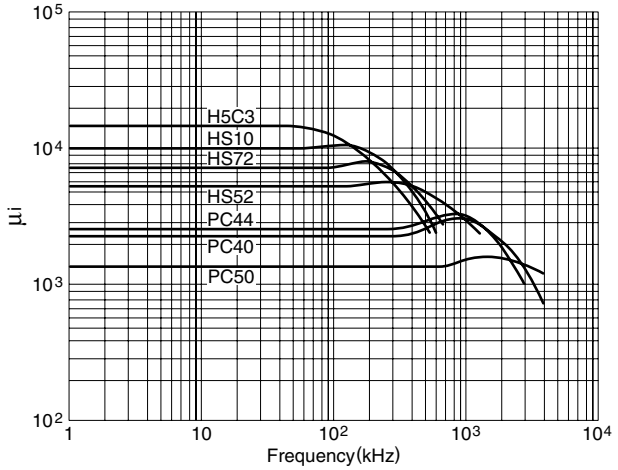
* *Average value*

Material				HP5	DN40	DN70
Initial permeability	μi			5000±20%	4000±25%	7500±25%
Relative loss factor	tanδ/μi	$\times10^{-6}$		<3.5(10kHz)	<2.5(10kHz)	<2.0(10kHz)
Temperature factor of initial permeability	αμir	$\times10^{-6}$	–30 to +20°C 0 to 20°C 20 to 70°C	 ±12.5% ±12.5%	–0.5 to 2.0 –0.5 to 2.0	–0.5 to 1.5 –0.5 to 1.5
Saturation magnetic flux density* [H=1194A/m]	Bs	mT	25°C	400	405	390
Remanent flux density*	Br	mT	25°C	65	95	45
Coercive force*	Hc	A/m	25°C	7.2	8.0	3.5
Curie temperature	Tc	°C		>140	>130	>105
Hysteresis material constant	η_B	$\frac{10^{-6}}{mT}$		<0.4	<0.8	<0.2
Disaccommodation factor	D_F	$\times10^{-6}$		<3	<3	<2.5
Density*	db	kg/m³		4.8×10^3	4.8×10^3	5.0×10^3
Electrical resistivity*	ρv	Ω • m		0.15	1.0	0.3

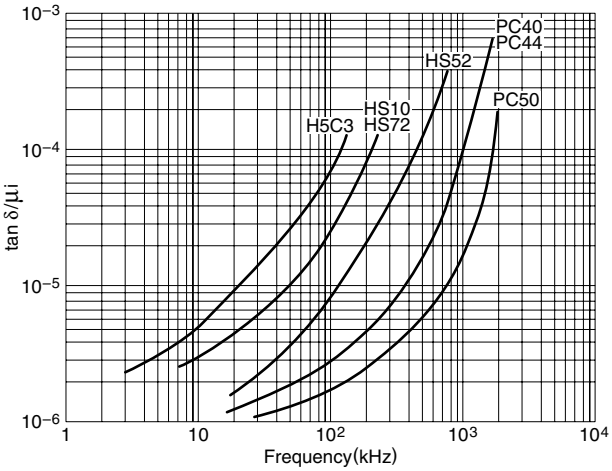
* *Average value*

Material Characteristics

μi vs. frequency Characteristics

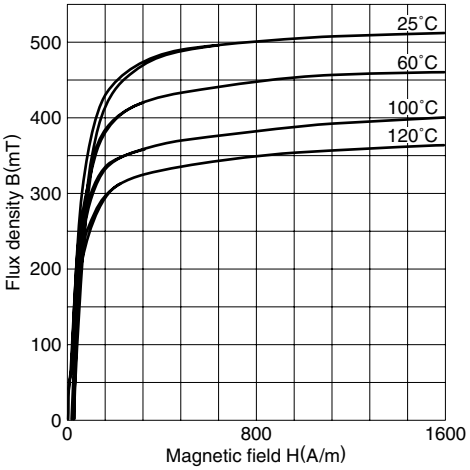


tanδ/μi vs. frequency Characteristics

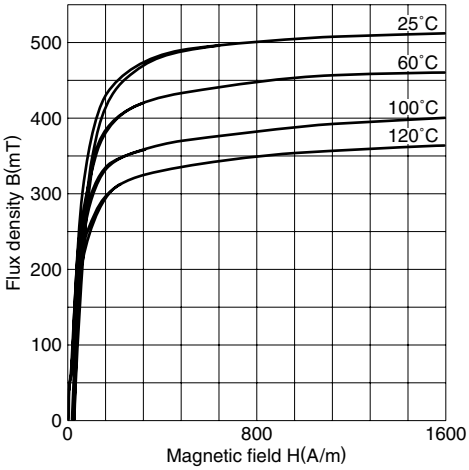


Magnetization Curves (Typical)

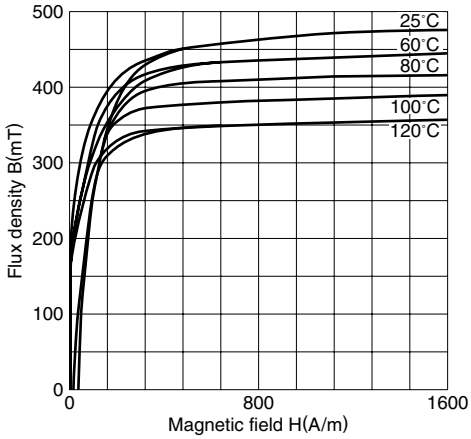
Material: PC40



Material: PC44

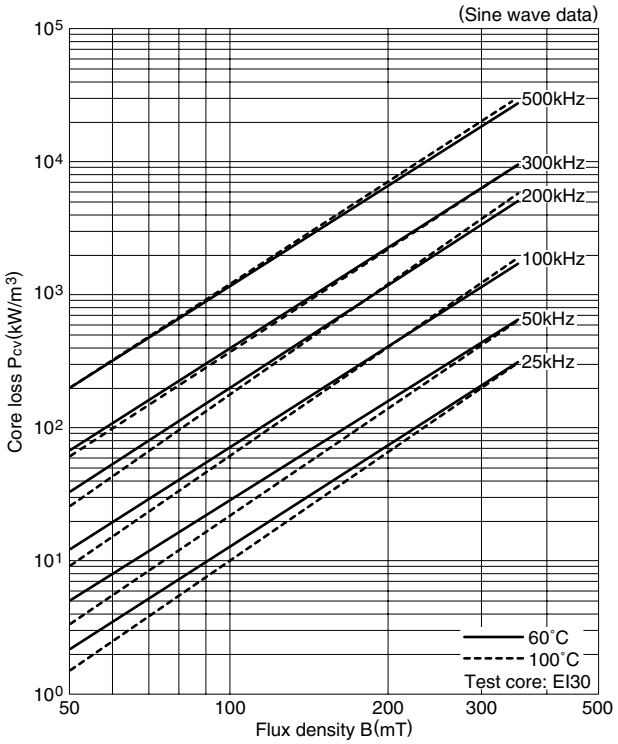


Material: PC50

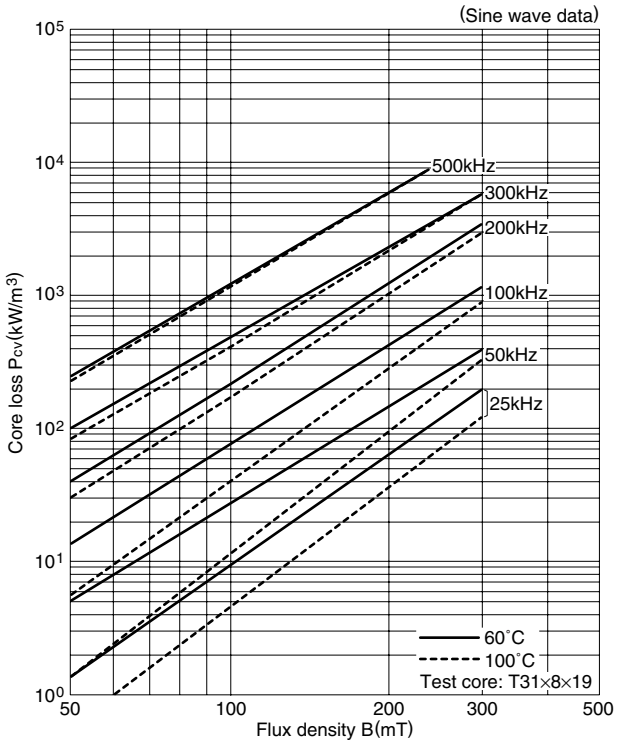


Core loss (Typical)

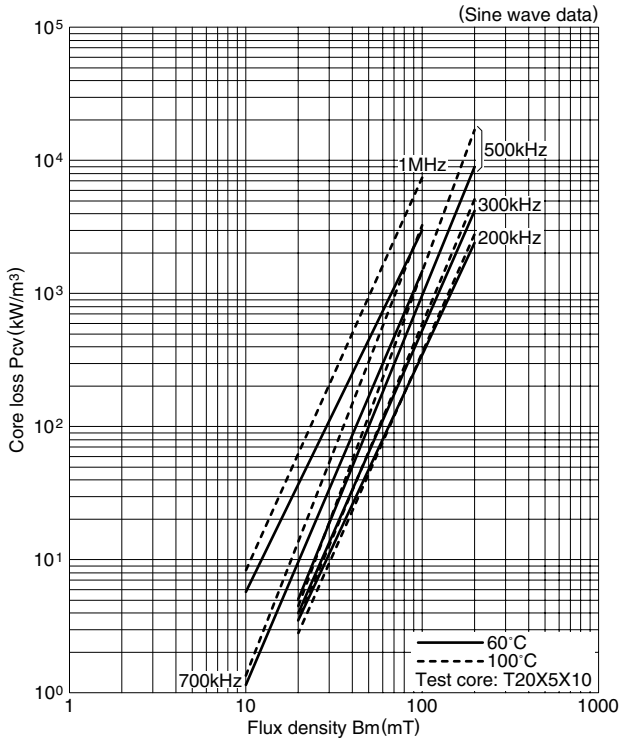
Material: PC40



Material: PC44



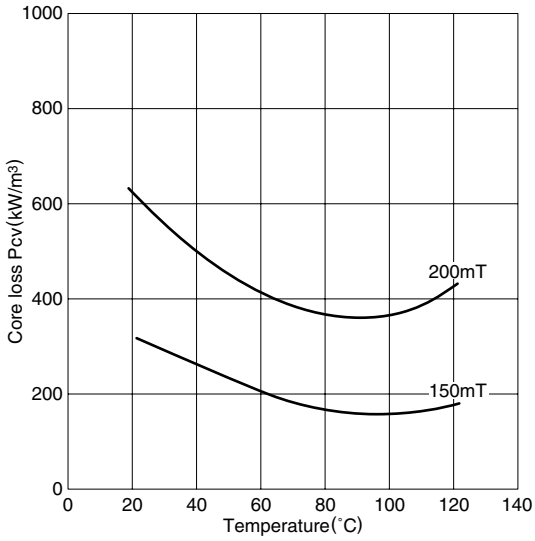
Material: PC50



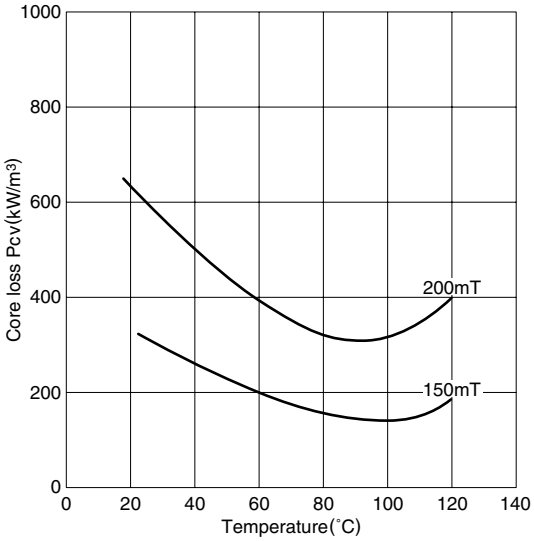
Material Characteristics

Temperature Dependence of Core loss (Typical)

Material: PC40 (Frequency: 100kHz)

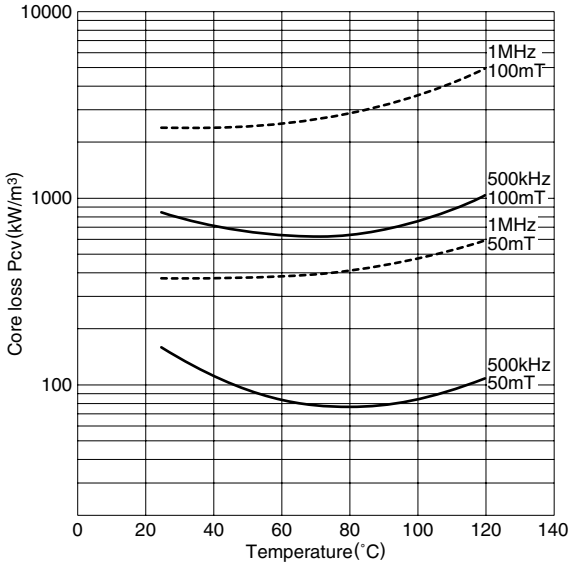


Material: PC44 (Frequency: 100kHz)



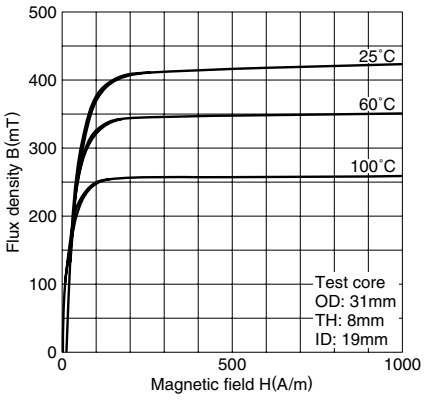
Test core: Toroidal
OD=31mm
TH=8mm
ID=19mm

Material: PC50

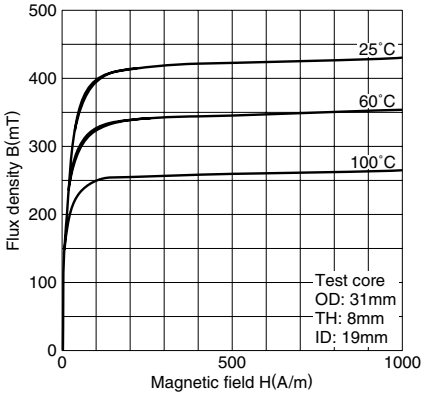


Magnetization Curves (Typical)

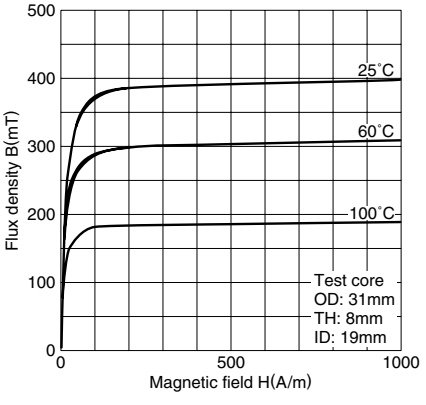
HS52



HS72

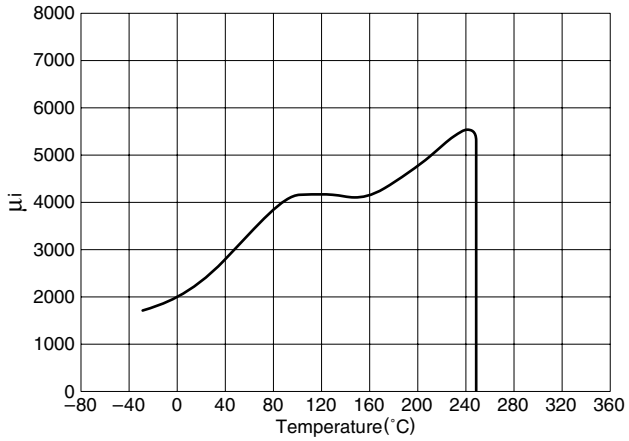


HS10

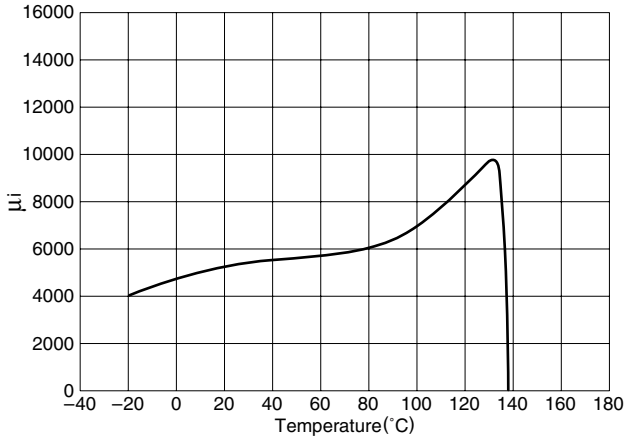


μi vs. Temperature Characteristics (Typical)

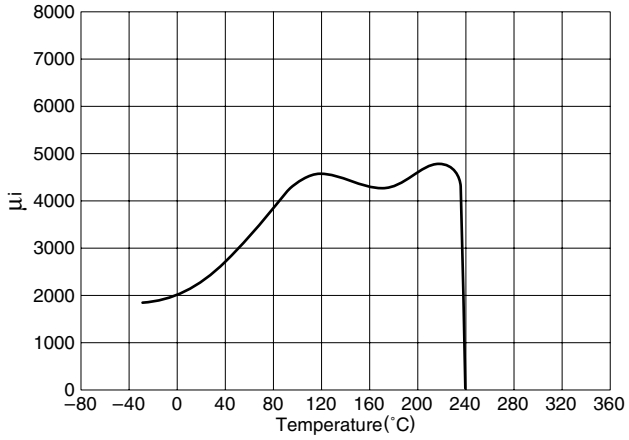
PC40



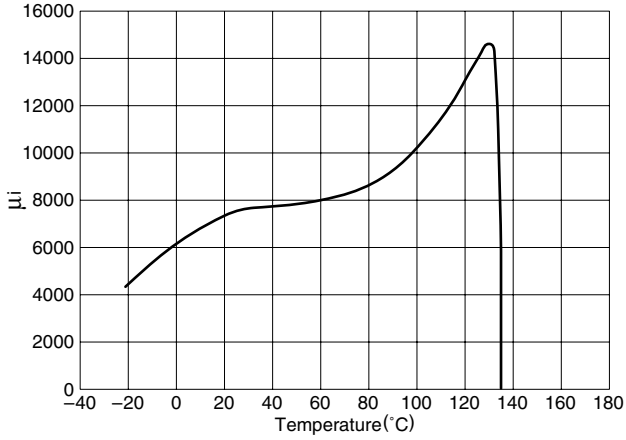
HS52



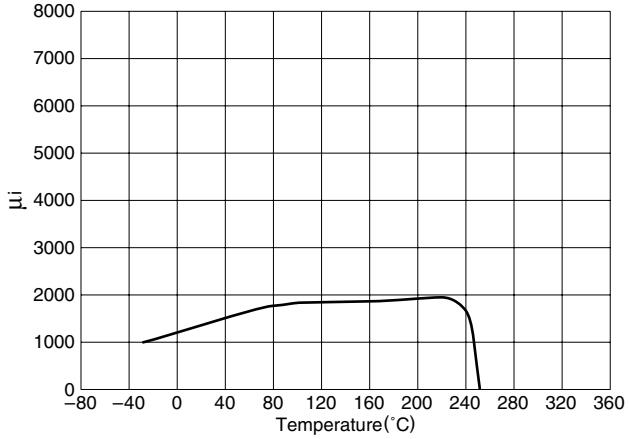
PC44



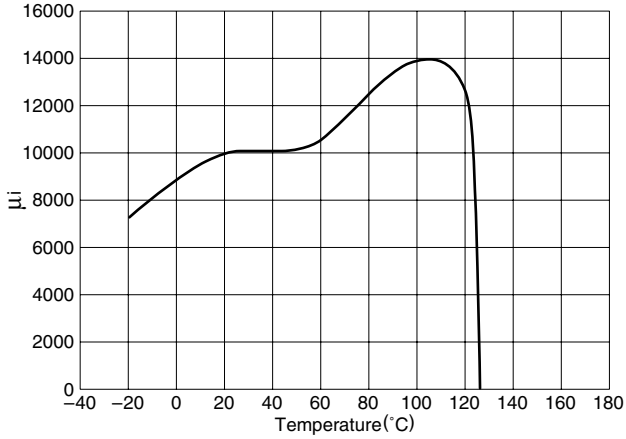
HS72



PC50



HS10



Test core: OD=31mm
TH=8mm
ID=19mm

Low Loss Ferrite Material PC47

for Power Supply

PC47 has the best properties for transformers of power supplies, adapters and chargers.
The core loss and saturation magnetic flux density of PC47 are far better than PC44 and PC40 which are currently in use.

FEATURES

- Core loss: 250kW/m^3 at 100kHz, 200mT, 100°C.
- Low core loss at wide frequency range 100kHz to 300kHz.
- Higher saturation flux density than PC44.

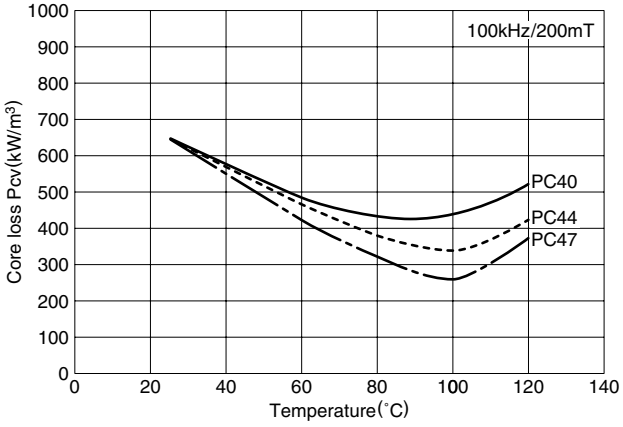
APPLICATIONS

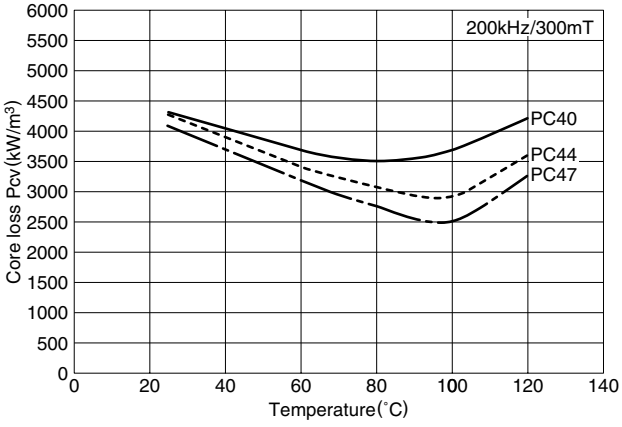
- Switching power supplies
- Adapters and chargers for notebook type pc
- CCFL LCD backlight

MATERIAL CHARACTERISTICS

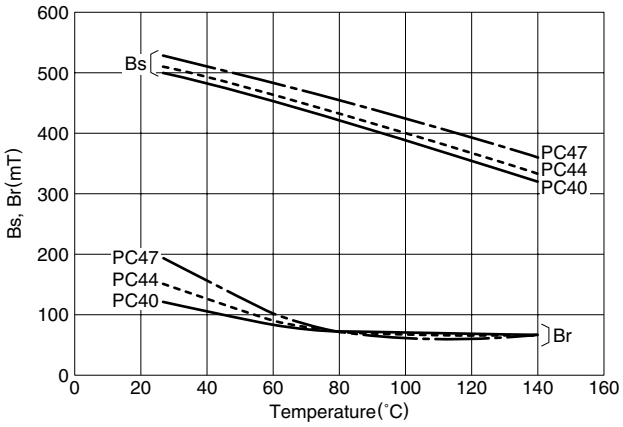
Material				**PC47(NEW)**	**PC44**	**PC40**
Initial permeability	μi		25°C	2500±25%	2400±25%	2300±25%
Core loss volume density [100kHz, 200mT]	Pcv	kW/m^3	25°C	600	600	600
			60°C	400	400	450
			100°C	250	300	410
Saturation magnetic flux density [1000A/m]	Bs	mT	25°C	530	510	510
			100°C	420	390	390
Remanent flux density	Br	mT	25°C	180	110	95
			100°C	60	60	55
Curie temperature	Tc	°C	min.	230	215	215
Density	db	kg/m^3		4.9×10^3	4.8×10^3	4.8×10^3

Pcv TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)

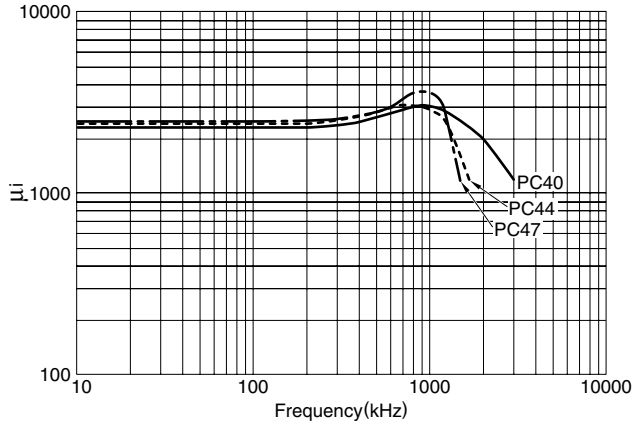




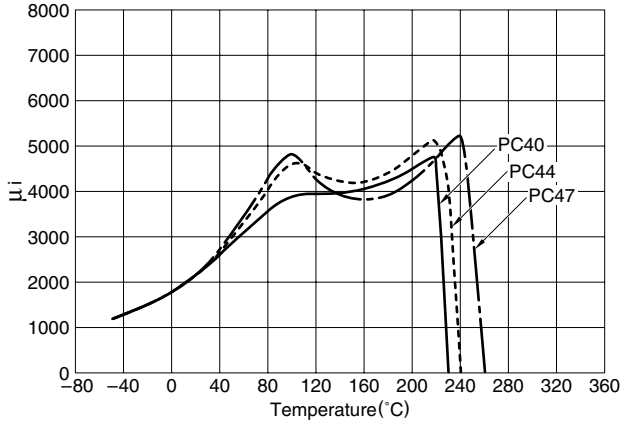
Bs and Br TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



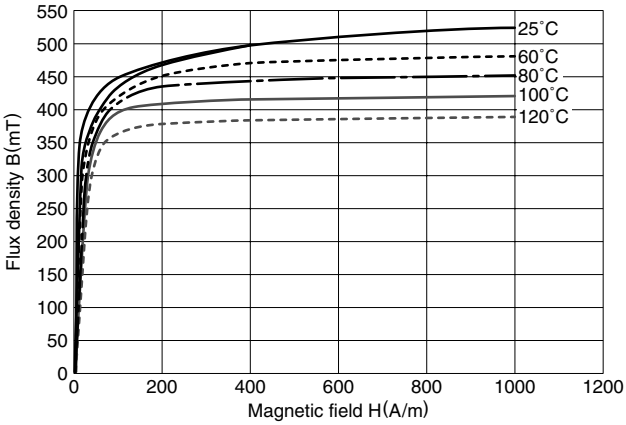
μi vs. FREQUENCY CHARACTERISTICS (Typical)



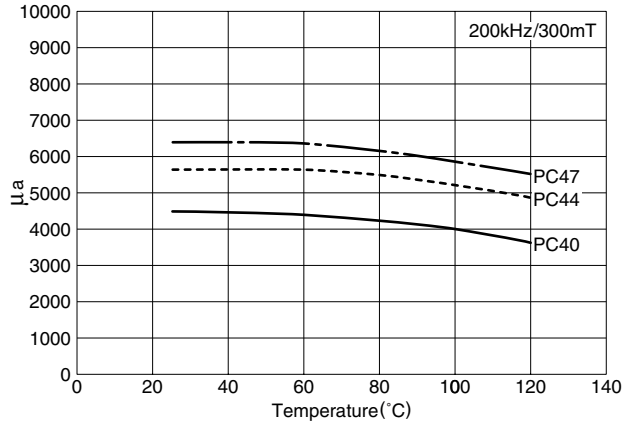
μi vs. TEMPERATURE CHARACTERISTICS (Typical)



MAGNETIZATION CURVES (Typical)
MATERIAL:PC47



μa TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



Low Loss Ferrite Materials PC45 and PC46

for Power Supply

In recent years, with the advent of notebook type pc, VCR's, digital camera's and mobile communication devices, technological demands have risen for higher performance CCFL LCD backlight units that have smaller sizes, lower profiles and higher efficiency.
The PC45 and PC46 are materials developed to achieve higher efficiency in designing minimize core loss at practical temperature ranges (PC45: 60 to 80°C and PC46: 40 to 50°C) and high saturation flux density.
They are also suitable for the transformers of DC to DC converters and adapters of notebook type pc.

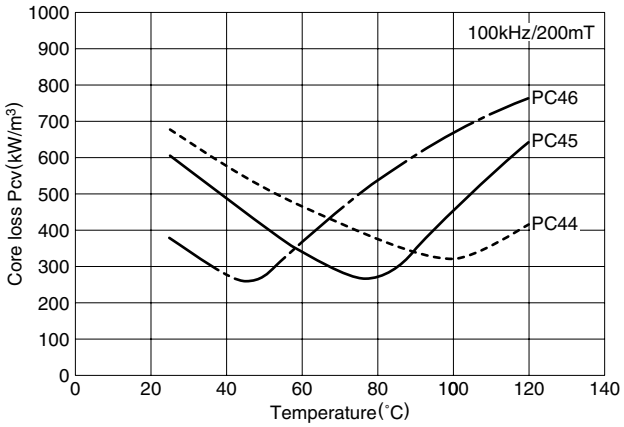
APPLICATIONS

- Switching power supplies
- Adapters and chargers for notebook type pc
- CCFL LCD backlight

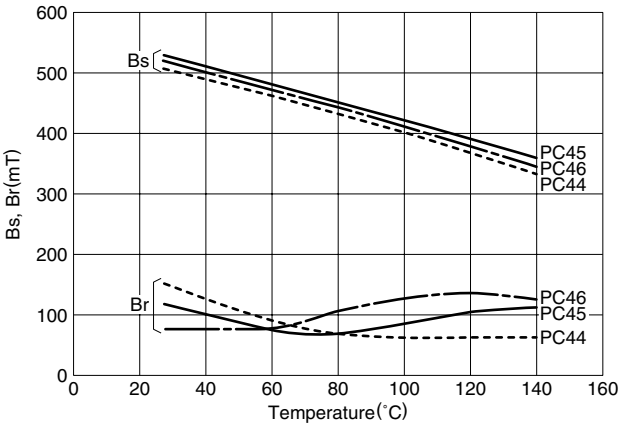
MATERIAL CHARACTERISTICS

Material				PC45(NEW)	PC46(NEW)	PC44
Initial permeability	μi		25°C	2500±25%	3200±25%	2400±25%
Core loss volume density [100kHz, 200mT]	Pcv	kW/m³	25°C	570	350	600
			60°C	250(75°C)	250(45°C)	400
			100°C	460	660	300
Saturation magnetic flux density [1000A/m]	Bs	mT	25°C	530	530	510
			100°C	420	410	390
Remanent flux density	Br	mT	25°C	120	80	110
			100°C	80	115	60
Curie temperature	Tc	°C	min.	230	230	215
Density	db	kg/m³		4.8×10^3	4.8×10^3	4.8×10^3

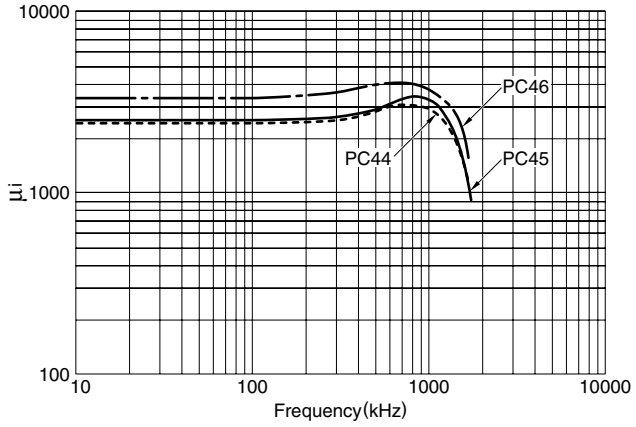
Pcv TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



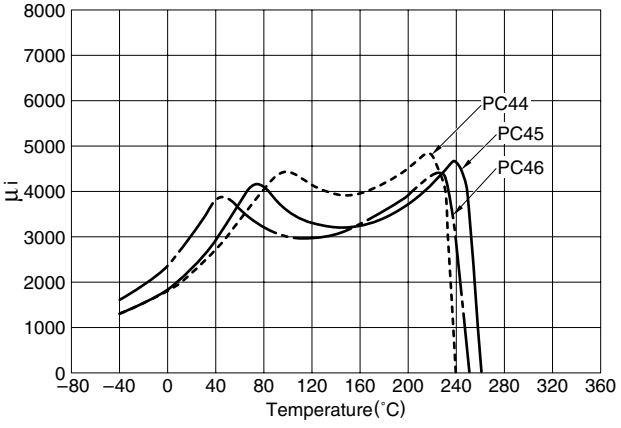
Bs and Br TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



μi vs. FREQUENCY CHARACTERISTICS (Typical)

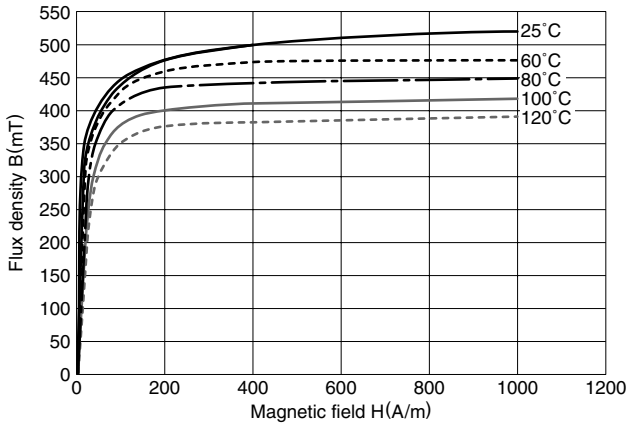


μi vs. TEMPERATURE CHARACTERISTICS (Typical)

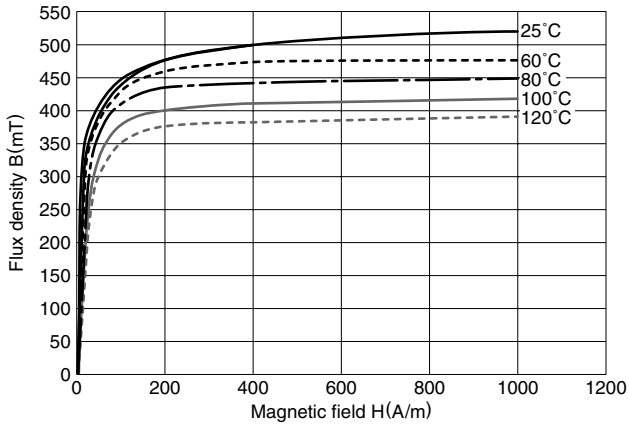


MAGNETIZATION CURVES

MATERIAL:PC45



MATERIAL:PC46



High Saturation Flux Density Material PC33

for Choke Coil

PC33 has the best properties for smoothing choke coil of power supplies.
The saturation magnetic flux density of PC33 is far better than PC44 and PC40 which are currently in use.

FEATURES

- Higher saturation flux density than PC44 and PC40.
- Most suitable ferrite material for choke coils.
- Maintain high saturation magnetic flux density at high temperature.

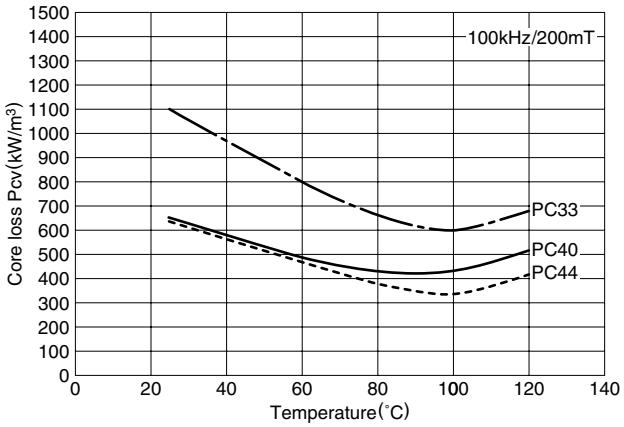
APPLICATIONS

- Power choke coils for switching power supplies
- Power choke coils for notebook type pc

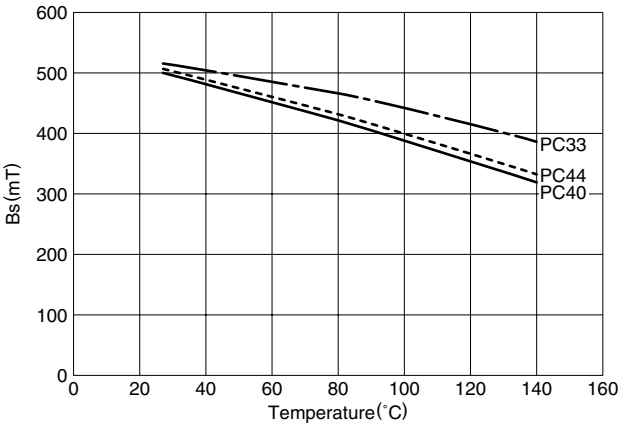
MATERIAL CHARACTERISTICS

Material				PC33(NEW)	PC44	PC40
Saturation magnetic flux density [1000A/m]	Bs	mT	25°C	510	510	510
			100°C	440	390	390
Initial permeability	μi		25°C	1400±25%	2400±25%	2300±25%
Core loss volume density [100kHz, 200mT]	Pcv	kW/m³	25°C	1100	600	600
			60°C	800	400	450
			100°C	600	300	410
Curie temperature	Tc	°C	min.	290	215	215
Density	db	kg/m³		4.8×10^3	4.8×10^3	4.8×10^3

Pcv TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



Bs TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



Low THD Materials DN40 and DN70

for xDSL Modem Transformers

The use of xDSL technique becomes wide spread as a high broad-band access to the internet. In order to utilize such network access as sufficient as possible, low THD (Total Harmonic Distortion) of transformer for xDSL modem is quite important to transfer the significant signals.

Materials DN40 and DN70, TDK achieved such requirements recently, are developed to meet low THD over a wide temperature range(0 to 85°C) and wide frequency range($\geqq$ 5kHz).

Therefore, They are suitable for the high performance transformer design for xDSL modem applications.

Standardization of A_L-value will help you to select the optimum core at the transformer design.

FEATURES

- Meet low THD over a wide temperature range(0 to 85°C) and wide frequency range ($\geqq$ 5kHz).

APPLICATIONS

- Transformer for xDSL modem

APPLIED CORE TYPE AND A_L-value

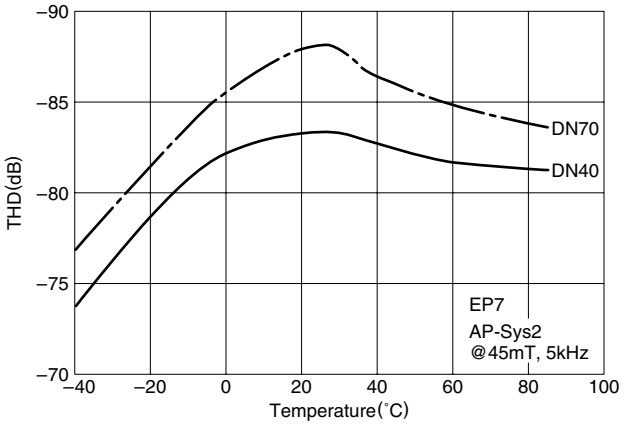
Core	Type	A_L-value
EP	EP7	40, 63, 100, 160, 250
	EP10	40, 63, 100, 160, 250
	EP13	63, 100, 160, 250, 400, 500

MATERIAL CHARACTERISTICS

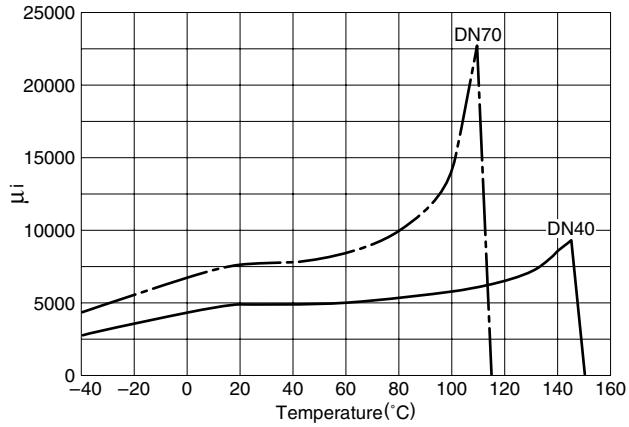
Material				**DN70(NEW)**	**DN40**
Initial permeability	μi		25°C	7500±25%	4000±25%
Relative loss factor [10kHz]	tanδ/μi	$\times 10^{-6}$	25°C	<2.0	<2.5
Temperature factor of intial permeability	αμir		–30 to +20°C 20 to 70°C	–0.5 to +1.5 –0.5 to +1.5	–0.5 to 2.0 –0.5 to 2.0
Saturation magnetic flux density [1000A/m]	Bs	mT	25°C	390	405
Hysteresis material constant [25°C, 1.5 to 3.0mT, 10kMz]	η_B	$\frac{10^{-6}}{mT}$		<0.2	<0.8
Curie temperature	Tc	°C	min.	105	130
Density	db	kg/m^3		5.0×10^3	4.8×10^3
Electrical resistivity	ρv	Ω • m		0.3	1.0

• Unless otherwise specify the tolerance, the values are shown as a typical.

THD TEMPERATURE DEPENDENCE CHARACTERISTICS (Typical)



μi vs. TEMPERATURE CHARACTERISTICS (Typical)



Part I

E Cores

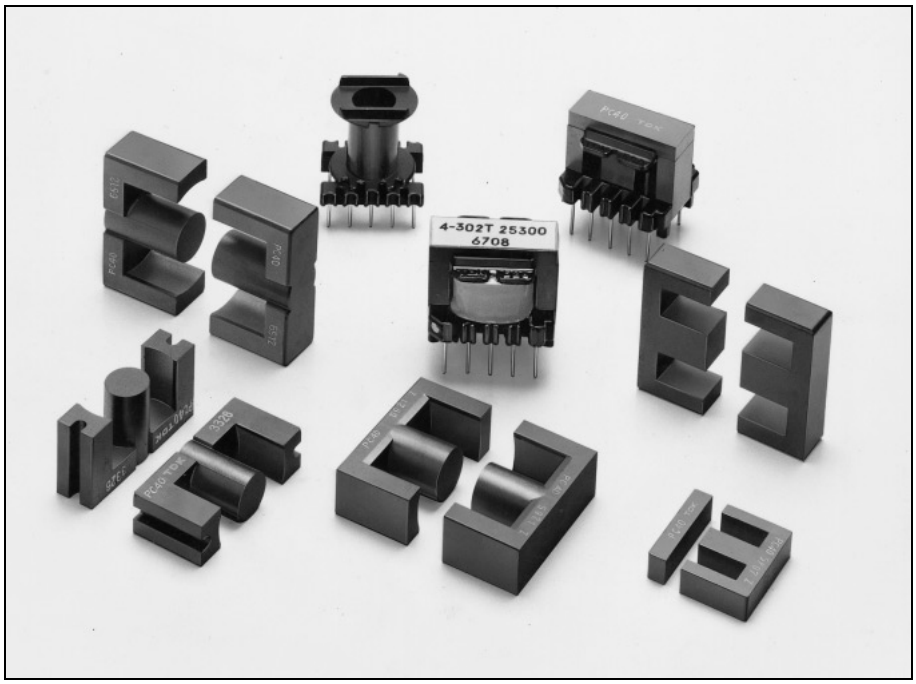
Cores

EI12.5 to EI60
EE8 to EE62.3/62/6
EF12.6 to EF32
EER25.5 to EER49
ETD19 to ETD49
EC70 to EC120

Bobbins

BE8 to BE62.3
BEER25.5 to BEER49
BETD19 to BETD24
BEC70 to BEC90

Accessories



Ordering Code System

Cores

PC40 EI 30 – Z

- PC40 — Material
- EI 30 — Size of E core
- Z — AL-value Z: without air gap
- G□: with air gap

Bobbins

B E30 – 1 1 10 CPFR

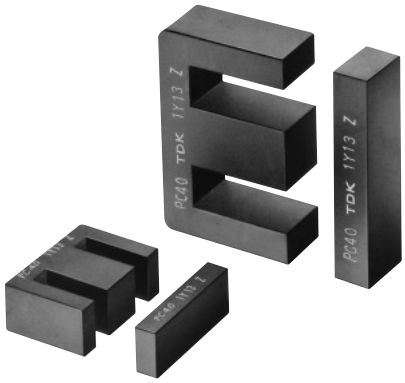
- B — Symbol of Bobbin
- E30 — Size of E core
- 1 — Code of Bobbin Material
- 1 — Number of Section
- 10 — Number of Terminal Pin
- CPFR — Type of Terminal Pin

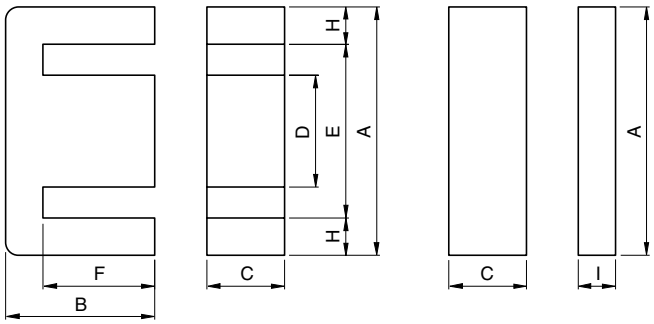
Accessories

F E – 30 – F

- F — Symbol of Accessory
- E – 30 — Size of E core
- F — Type of Accessory

EI Cores





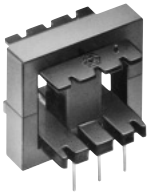
Part No.	JIS	Dimensions in mm / inches						
		A	**B**	**C**	**D**	**E** min.	**F**	**H**
PC40EI12.5-Z	JIS FEI 12.5	12.4±0.3 .488±.012	7.4±0.1 .291±.004	4.85±0.15 .191±.006	2.4±0.1 .094±.004	8.8 .346	5.1±0.1 .201±.004	1.6 .063
PC40EI16-Z	JIS FEI 16	16.0±0.3 .630±.012	12.2±0.2 .480±.008	4.8±0.2 .189±.008	4.0±0.2 .157±.008	11.6 .457	10.2±0.2 .402±.008	2.05 .081
PC40EI19-Z		20.0±0.3 .787±.012	13.55±0.25 .533±.010	5.0±0.2 .197±.008	4.55±0.15 .179±.006	14.3 .563	11.15±0.15 .439±.006	2.75 .108
PC40EI22-Z		22.0±0.3 .866±.012	14.55±0.25 .573±.010	5.75±0.25 .226±.010	5.75±0.25 .226±.010	13.0 .512	10.55±0.25 .415±.010	4.5 .177
PC40EI22/19/6-Z	JIS FEI 22	22.0±0.4 .866±.016	14.7±0.2 .579±.008	5.75±0.25 .226±.010	5.75±0.25 .226±.010	15.75 .620	10.7±0.2 .421±.008	3.0 .118
PC40EI25-Z		25.3±0.5 .996±.020	15.55±0.25 .612±.010	6.75±0.25 .266±.010	6.5±0.3 .256±.012	19.0 .748	12.35±0.25 .486±.010	3.0 .118
PC40EI28-Z	JIS FEI 28	$28.0^{+0.7}_{-0.5}$ $1.102^{+.028}_{-.020}$	16.75±0.25 .659±.010	10.6±0.2 (E core) .417±.008 (E core) 10.7±0.3 (I core) .421±.012 (I core)	7.2±0.3 .283±.012	18.4 .724	12.25±0.25 .482±.010	4.5 .177
PC40EI30-Z	JIS FEI 30	$30.0^{+0.7}_{-0.4}$ $1.181^{+.028}_{-.016}$	21.25±0.25 .837±.010	10.7±0.3 .421±.012	10.7±0.3 .421±0.12	19.7 .776	16.25±0.25 .640±.010	5.0 .197
PC40EI33/29/13-Z		$33.0^{+0.8}_{-0.5}$ $1.299^{+.031}_{-.020}$	23.75±0.25 .935±.010	12.7±0.3 .500±.012	9.7±0.3 .382±.012	23.4 .921	19.25±0.25 .758±.010	4.45 .175
PC40EI35-Z	JIS FEI 35	35.0±0.5 1.378±.020	24.35±0.15 .959±.006	10.0±0.3 .394±.012	10.0±0.3 .394±.012	24.5 .965	18.25±0.15 .719±.006	5.0 .197
PC40EI40-Z	JIS FEI 40	40.0±0.5 1.575±.020	27.25±0.25 1.073±.010	11.65±0.35 .459±.014	11.65±0.35 .459±.014	27.2 1.071	20.25±0.25 .797±.010	6.2 .244
PC40EI50-Z	JIS FEI 50	$50.0^{+1.2}_{-0.7}$ $1.969^{+.047}_{-.028}$	33.35±0.35 1.313±.014	14.6±0.4 .575±.016	14.6±0.4 .575±.016	33.5 1.319	24.75±0.25 .974±.010	7.7 .303
PC40EI60-Z	JIS FEI 60	$60.0^{+1.4}_{-0.8}$ $2.362^{+.055}_{-.031}$	35.85±0.35 1.411±.014	15.6±0.4 .614±.016	15.6±0.4 .614±.016	43.6 1.717	27.85±0.35 1.096±.014	7.7 .303

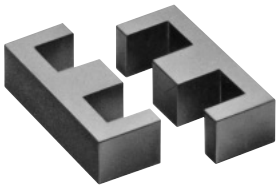
* Please see the next page additionally.

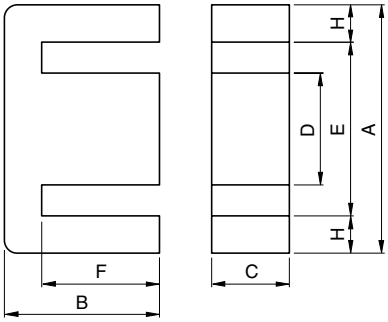
* Please see the former page additionally.

	Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
l	C_1 (mm^{-1})	Ae (mm^2)	ℓ_e (mm)	Ve (mm^3)	A_L-value (nH/N^2)* Without air gap	With air gap	Core loss (W) max. 100kHz, 200mT, 100°C		
1.5±0.1 .059±.004	1.48	14.4	21.3	308	1200±25%	63±7% 100±10%	0.12	1.9	BE12.5-1110CPFR
2.0±0.2 .079±.008	1.75	19.8	34.6	685	1100±25%	80±7% 160±10%	0.31	3.3	BE16-116CPFR BE16-118CPHFR BE16-1110CPNFR
2.3±0.1 .091±.004	1.65	24.0	39.6	950	1400±25%	80±7% 160±10%	0.42	5.1	BE19-116CPFR BE19-118CPHFR BE-19-5116
4.5±0.2 .177±.008	0.936	42.0	39.3	1650	2400±25%	125±7% 250±10%	0.6	9.8	BE22-1110CPFR BE22-118CPFR BE-22-5116
4.0±0.2 .157±.008	1.13	37.0	41.8	1550	2000±25%	125±7% 250±10%	0.64	8.5	BE22/19/6-118CPFR
2.7±0.2 .106±.008	1.15	41.0	47.0	1930	2140±25%	125±7% 250±10%	0.79	9.8	BE25-118CPFR BE-25-5116
3.5±0.3 .138±.012	0.57	86.0	48.2	4150	4300±25%	200±5% 400±7%	1.65	22	BE28-1110CPLFR
5.5±0.2 .217±.008	0.522	111	58.0	6440	4690±25%	200±5% 400±7%	3.1	34	BE30-1110CPFR BE30-1112CPFR BE-30-5112
5.0±0.3 .197±.012	0.567	119	67.5	8030	4400±25%	200±5% 400±7%	3.5	41	BE33-1112CPLFR
4.6±0.3 .181±.012	0.664	101	67.1	6780	3800±25%	200±5% 400±7%	2.85	36	BE35-1112CPLFR
7.5±0.3 .295±.012	0.520	148	77.0	11400	4860±25%	200±5% 400±7%	4.8	60	BE40-1112CPFR BE40-1112CPNFR BE-40-5112
9.0±0.3 .354±.012	0.409	230	94.0	21620	6110±25%	250±5% 500±7%	9.2	115	BE50-1112CPFR BE-50-5112
8.5±0.3 .335±.012	0.441	247	109	26900	5670±25%	250±5% 500±7%	12.5	139	BE60-1112CPFR BE-60-5112

* *A_L-value: 1kHz, 0.5mA, 100Ts*



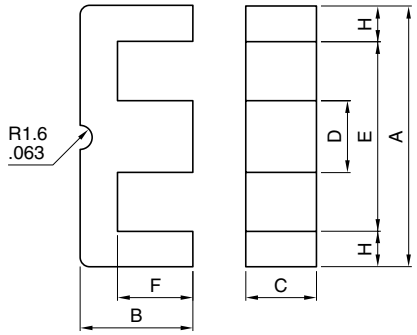




Type 1

Part No.	U.S. lam. cores, DIN standard JIS	Type	Dimensions in mm / inches						
			A	B	C	D	E min.	F	H
PC40EE8-Z	JIS FEE 8.3	1	8.3±0.2 .327±.008	4.0±0.1 .157±.004	3.6±0.2 .142±.008	1.85±0.15 .073±.006	6.0 .236	3.0±0.1 .118±.004	1.0 .039
PC40EE10/11-Z	JIS FEE 10.2	1	10.2±0.2 .402±.008	5.5±0.1 .217±.004	4.75±0.15 .187±.006	2.45±0.15 .096±.006	7.7 .303	4.20±0.15 .165±.006	1.1 .043
PC40EF12.6-Z	DIN 41985	1	12.7±0.4 .500±.016	6.4±0.1 .252±.004	3.6±0.2 .142±.008	3.65±0.15 .144±.006	8.8 .346	4.65±0.15 .183±.006	1.83 .072
PC40EE13-Z		1	13.0±0.2 .512±.008	6.00±0.15 .236±.006	6.15±0.15 .242±.006	2.75±0.15 .108±.006	10.0 .394	4.6±0.1 .181±.004	1.4 .055
PC40EE16-Z	JIS FEE 16A	1	16.0±0.3 .630±.012	7.15±0.15 .281±.006	4.8±0.2 .189±.008	4.0±0.2 .157±.008	11.7 .461	5.1±0.2 .201±.008	2.0 .079
PC40SEE16-Z		1	16.0±0.3 .630±.012	7.15±0.15 .281±.006	6.8±0.2 .268±.008	3.18±0.18 .125±.007	12.5 .492	5.5±0.1 .217±.004	1.6 .063
PC40EF16-Z	DIN 41985	1	16.1±0.6 .634±.024	8.05±0.15 .317±.006	4.5±0.2 .177±.008	4.55±0.15 .179±.006	11.3 .445	5.9±0.2 .232±.008	2.2 .087
PC40EE19-Z	JIS FEE 19A	1	19.1±0.3 .752±.012	7.95±0.15 .313±.006	5.0±0.2 .197±.008	4.55±0.15 .179±.006	14.2 .559	5.6±0.1 .220±.004	2.3 .091
PC40EE19/16-Z	U.S. EE-187	1	19.29±0.32 .759±.013	8.1±0.18 .319±.007	4.75±0.13 .187±.005	4.75±0.08 .187±.003	14.05 .553	5.715±0.125 .225±.005	2.46 .097
PC40EE20/20/5-Z	DIN 41295	2	20.15±0.55 .793±.022	10.0±0.2 .394±.008	5.1±0.2 .201±.008	5.0±0.2 .197±.008	12.8 .504	6.5±0.2 .256±.008	3.53 .139
PC40EF20-Z	DIN 41985	1	20.0±0.4 .787±.016	9.9±0.2 .390±.008	5.65±0.25 .222±.010	5.7±0.2 .224±.008	14.1 .555	7.2±0.2 .283±.008	2.8 .110
PC40EE22-Z		1	22.0±0.3 .866±.012	9.35±0.15 .368±.006	5.75±0.25 .226±.010	5.75±0.25 .226±.010	13.0 .512	5.35±0.15 .211±.006	4.3 .169
PC40EE25/19-Z	U.S. EE-24/25	1	25.4±0.5 1.000±.020	9.46±0.19 .372±.007	6.29±0.19 .248±.007	6.35±0.25 .250±.010	18.55 .730	6.41±0.19 .252±.007	3.11 .122
PC40EF25-Z	DIN 41985	1	25.05±0.75 .986±.030	12.55±0.25 .494±.010	7.2±0.3 .283±.012	7.25±0.25 .285±.010	17.5 .689	8.95±0.25 .352±.010	3.55 .140
PC40EE25.4-Z	JIS FEE 25.4A	1	25.4±0.76 1.000±.030	9.66±0.15 .380±.006	6.35±0.25 .250±.010	6.35±0.25 .250±.010	18.5 .728	6.48±0.15 .255±.006	3.18 .125
PC40EE30-Z	JIS FEE 30A	1	30.0±0.5 1.181±.020	13.15±0.15 .518±.006	10.7±0.3 .421±.012	10.7±0.3 .421±.012	19.7 .776	8.15±0.15 .321±.006	5.0 .197
PC40EE30/30/7-Z	DIN 41295	2	30.1±0.7 1.185±.028	15.0±0.2 .591±.008	7.05±0.25 .278±.010	6.95±0.25 .274±.010	19.5 .768	9.95±0.25 .392±.010	5.1 .201

* Please see the next page additionally.

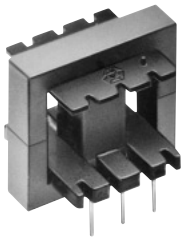


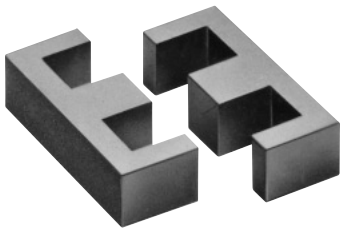
Type 2

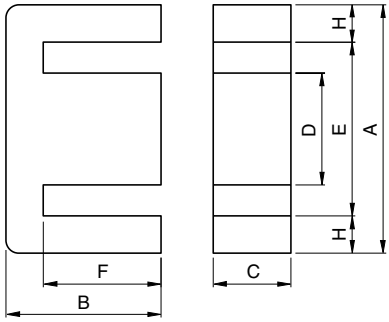
Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	A_L-value (nH/N²)* Without air gap	With air gap	Core loss (W) max. 100kHz, 200mT, 100°C		
2.75	7.0	19.2	134	610±25%	40±7% 63±10%	0.06	0.7	BE8-116CPHFR
2.16	12.1	26.1	315	850±25%	40±7% 63±10%	0.14	1.5	BE10-118CPSFR
2.28	13.0	29.6	385	810±25%	63±7% 100±10%	0.17	2.0	—
1.77	17.1	30.2	517	1130±25%	63±7% 100±10%	0.235	2.7	BE13-1110CPSFR
1.82	19.2	34.5	656	1140±25%	80±7% 160±10%	0.31	3.3	BE16-116CPFR BE16-118CPHFR BE16-1110CPNFR
1.69	21.7	36.6	795	1240±25%	80±7% 160±10%	0.37	4.1	BES16-1110CPSFR
1.87	20.1	37.6	754	1100±25%	63±7% 100±10%	0.32	3.9	—
1.71	23.0	39.4	906	1250±25%	80±7% 160±10%	0.42	4.8	BE19-116CPFR BE19-118CPHFR BE-19-5116
1.75	22.4	39.1	876	1350±25%	80±7% 160±10%	0.41	4.8	
1.38	31.0	43.0	1340	1400±25%	100±7% 160±10%	0.51	7.5	—
1.34	33.5	44.9	1500	1570±25%	100±7% 160±10%	0.69	7.4	—
0.970	41.0	39.6	1620	2180±25%	125±7% 250±10%	0.61	8.8	BE22-1110CPFR BE22-118CPFR BE-22-5116
1.22	40.0	48.7	1950	2000±25%	100±7% 200±10%	0.86	9.1	—
1.11	51.8	57.8	2990	2000±25%	100±7% 160±10%	1.40	15	—
1.21	40.3	48.7	1963	2000±25%	125±7% 250±10%	0.90	10	—
0.529	109.0	57.7	6290	4690±25%	200±5% 400±7%	2.90	32	BE30-1110CPFR BE30-1112CPFR BE-30-5112
1.12	59.7	66.9	4000	2100±25%	160±5% 250±7%	1.51	22	—

* *A_L-value: 1kHz, 0.5mA, 100Ts*

* Please see the former page additionally.







Type 1

Part No.	U.S. lam. cores, DIN standard JIS		Type	Dimensions in mm / inches A	B	C	D	E min.	F	H
PC40EF32-Z	DIN 41985		1	32.1±0.8 1.264±.031	16.1±0.3 .634±.012	9.15±0.35 .360±.014	9.2±0.3 .362±.012	22.7 .894	11.6±0.3 .457±.012	4.4 .173
PC40EE35/28B-Z	U.S. EE-375		1	34.6±0.5 1.362±.020	14.27±0.37 .562±.014	9.31±0.30 .367±.012	9.4±0.3 .370±.012	25.0 .984	9.78±0.25 .385±.010	4.5 .177
PC40EE35-Z	JIS FEE35B		1	34.54±1.0 1.360±.039	14.35±0.35 .564±.014	9.53±0.38 .375±.015	9.39±0.27 .370±.011	24.89 .980	9.71±0.28 .382±.011	4.75 .187
PC40EE40-Z	JIS FEE40A		1	40.0±0.5 1.575±.020	17.0±0.3 .669±.012	10.7±0.3 .421±.012	10.7±0.3 .421±.012	27.4 1.079	10.25±0.25 .404±.010	6.0 .236
PC40EE41/33C-Z	U.S. EE-21		1	41.07±0.8 1.617±.031	16.78±0.4 .661±.016	12.57±0.38 .495±.015	12.64±0.45 .498±.018	28.55 1.124	10.38±0.3 .409±.012	6.0 .236
PC40EE42/42/15-Z	DIN 41295	JIS FEE42A	1	42.15±0.85 1.659±.033	21.0±0.2 .827±.008	14.95±0.25 .589±.010	11.95±0.25 .470±.010	29.5 1.161	15.15±0.35 .596±.014	6.025 .237
PC40EE42/42/20-Z	DIN 41295	JIS FEE42B	1	42.15±0.85 1.659±.033	21.0±0.2 .827±.008	19.7±0.3 .776±.012	11.95±0.25 .470±.010	29.5 1.161	15.15±0.35 .596±.014	6.025 .237
PC40EE47/39-Z	U.S. EE-625		1	47.12±0.48 1.855±.0.19	19.63±0.2 .773±.008	15.62±0.25 .615±.010	15.62±0.25 .615±.010	31.72 1.249	12.2±0.13 .480±.005	7.49 .295
PC40EE50-Z	JIS FEE50A		1	$50.0^{+1.0}_{-0.7}$ $1.969^{+.039}_{-.028}$	21.3±0.3 .839±.012	14.6±0.4 .575±.016	14.6±0.4 .575±.016	34.2 1.346	12.75±0.25 .502±.010	7.5 .295
PC40EE55/55/21-Z	DIN 41295	JIS FEE55	1	55.15±1.05 2.17±.041	27.5±0.3 1.083±.012	20.7±0.3 .815±.012	16.95±0.25 .667±.010	37.5 1.476	18.8±0.3 .740±.012	8.53 .336
PC40EE57/47-Z	U.S. EE-75		1	56.57±1.00 2.227±.039	23.60±0.23 .929±.009	18.8±0.25 .740±.010	18.80±0.25 .740±.010	38.1 1.500	14.63±0.15 .576±.006	9.02 .355
PC40EE60-Z	JIS FEE60A		1	$60.0^{+1.1}_{-0.8}$ $2.362^{+.043}_{-.031}$	22.3±0.3 .878±.012	15.6±0.4 .614±.016	15.6±0.4 .614±.016	43.8 1.724	14.05±0.25 .553±.010	7.7 .303
PC40EE50.3/51/6-Z			1	50.3±0.8 1.980±.031	25.6±0.25 1.008±.010	$6.1^{+0.4}_{-0.2}$ $.240^{+.016}_{-.008}$	19.9±0.35 .783±.014	29.5 1.161	15.9±0.25 .626±.010	10 .394
PC40EE62.3/62/6-Z			1	62.3±1.2 2.453±.047	31.0±0.25 1.220±.010	$6.1^{+0.4}_{-0.2}$ $.240^{+.016}_{-.008}$	25.3±0.5 .996±.020	35.9 1.413	18.7±0.25 .736±.010	12.6 .496

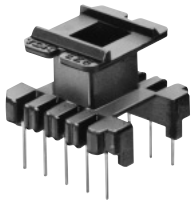
* Please see the next page additionally.

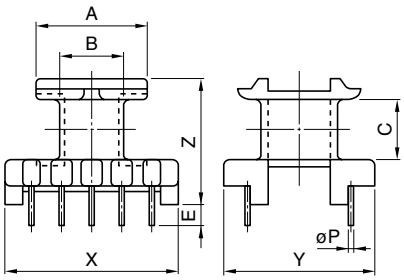
* Please see the former page additionally.

Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C_1 (mm^{-1})	Ae (mm^2)	ℓ e (mm)	Ve (mm^3)	A_L-value (nH/N^2)* Without air gap	With air gap	Core loss (W) max. 100kHz, 200mT, 100°C		
0.893	83.2	74.3	6180	2590±25%	160±5% 250±7%	2.90	32	—
0.819	84.9	69.6	5907	2950±25%	200±5% 400±7%	2.33	28	—
0.774	89.3	69.2	6179	3170±25%	200±5% 400±7%	3.00	33	—
0.606	128	77.3	9890	4150±25%	200±5% 400±7%	4.20	50	BE40-1112CPFR BE40-1112CPNFR BE-40-5112
0.495	157	77.6	12165	5060±25%	200±5% 400±7%	5.80	64	—
0.547	178	97.4	17400	4700±25%	250±5% 400±7%	8.00	80	—
0.415	235	97.4	22900	6100±25%	250±5% 400±7%	10.4	116	—
0.374	242	90.6	21930	6660±25%	250±5% 400±7%	9.70	108	—
0.425	226	95.8	21600	6110±25%	250±5% 400±7%	9.40	116	BE50-1112CPFR BE-50-5112
0.348	354	123	43700	7100±25%	250±5% 400±7%	11.0**	234	—
0.297	344	102	35100	8530±25%	250±5% 400±7%	8.5**	190	—
0.446	247	110	27100	5670±25%	250±5% 500±7%	12.5	135	BE60-1112CPFR BE-60-5112
0.868	121	105	12700	2900±25%	200±5% 400±7%	5.83	68	BE50.3-1112CPHFR
0.823	153	126	19300	3100±25%	200±5% 400±7%	8.85	102	BE62.3-1112CPHFR

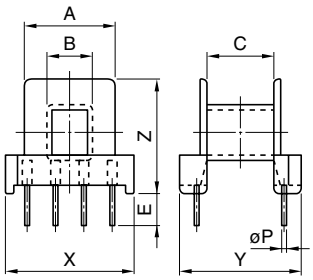
** A_L-value: 1kHz, 0.5mA, 100Ts*
*** Core loss: 100kHz, 150mT, 100°C*

EE and EI Bobbins

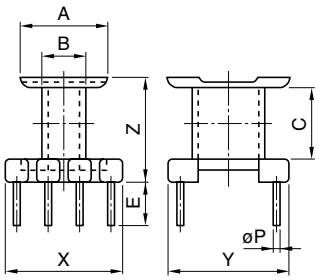




Type 1



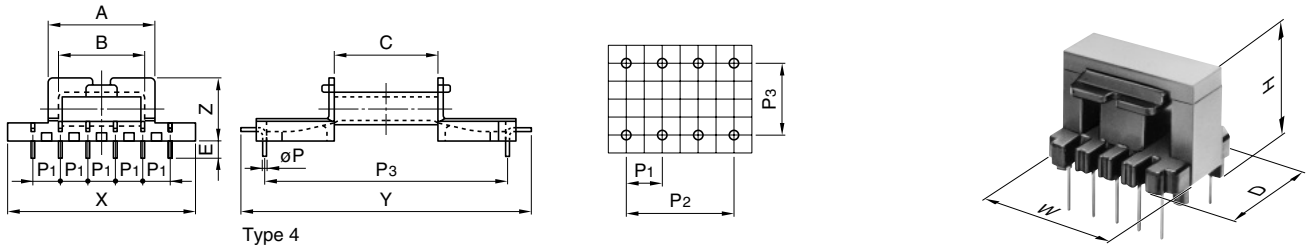
Type 2



Type 3

Part No.	Type	Dimensions in mm inches						
		A	**B**	**C**	**E**	**X**	**Y**	**Z**
BE8-116CPHFR	2	5.8 .228	3.0 .118	4.78 .188	2.7 .106	8.0 .315	8.8 .346	8.4 .331
BE10-118CPSFR	3	7.2 .283	3.5 .138	6.6 .260	3.85 .152	10.2 .402	10.2 .402	9.0 .354
BE12.5-1110CPFR	1	8.5 .335	3.6 .142	3.5 .138	3.25 .128	12.35 .486	12.35 .486	8.3 .327
BE13-1110CPSFR	3	10.0 .394	4.0 .157	7.4 .291	3.7 .146	12.1 .476	12.5 .492	10.4 .409
BE16-116CPFR	3	11.5 .453	5.15 .203	8.5 .335	3.8 .150	11.5 .453	13.0 .512	11.5 .453
BE16-118CPHFR	2	11.4 .449	5.15 .203	8.6 .339	4.0 .157	15.0 .591	13.4 .528	13.4 .528
BE16-1110CPNFR	1	11.35 .447	5.65 .222	8.15 .321	3.8 .150	16.0 .630	13.0 .512	13.85 .545
BES-16-1110CPSFR	3	12.2 .480	4.6 .181	8.7 .343	5.0 .197	15.9 .426	14.0 .551	11.7 .461
BE19-116CPFR	3	13.8 .543	5.8 .228	9.1 .358	5.0 .197	13.8 .543	16.5 .650	12.0 .472
BE19-118CPHFR	2	14.0 .551	6.65 .262	9.0 .354	6.0 .236	20.0 .787	16.2 .638	18.6 .732
BE22-118CPFR	1	12.5 .492	7.9 .311	8.45 .332	6.0 .236	22.0 .866	17.0 .669	17.5 .689
BE22/19/6-118CPFR	1	15.2 .598	7.9 .311	8.45 .332	6.0 .236	22.0 .866	17.0 .669	17.3 .681
BE25-118CPFR	1	18.1 .713	9.1 .358	9.8 .386	6.0 .236	25.0 .984	18.0 .709	19.3 .760
BE28-1110CPLFR	1	18.1 .713	9.9 .390	9.6 .378	7.0 .276	28.0 1.102	25.0 .984	20.6 .811
BE30-1110CPFR	1	19.2 .756	13.1 .516	13.7 .539	7.0 .276	30.0 1.181	25.0 .984	25.6 1.008
BE30-1112CPFR	1	19.4 .764	13.1 .516	13.7 .539	7.0 .276	30.0 1.181	25.0 .984	25.6 1.008
BE33-1112CPLFR	1	23.1 .909	12.4 .488	16.6 .654	7.0 .276	33.0 1.299	28.0 1.102	28.6 1.126
BE35-1112CPLFR	1	24.0 .945	12.7 .500	15.7 .618	7.0 .276	35.0 1.378	25.0 .984	28.7 1.130
BE40-1112CPFR	1	26.5 1.043	14.0 .551	17.3 .681	7.0 .276	36.0 1.417	30.0 1.181	30.5 1.201
BE40-1112CPNFR	1	26.5 1.043	14.0 .551	17.3 .681	7.0 .276	36.0 1.417	30.0 1.181	30.5 1.201
BE50-1112CPFR	1	33.2 1.307	17.2 .677	21.3 .839	9.0 .354	50.0 1.969	36.0 1.417	36.65 1.443
BE60-1112CPFR	1	43.3 1.705	18.5 .728	23.8 .937	10.0 .394	56.0 2.205	45.0 1.772	38.9 1.531
BE50.3-1112CPHFR	4	29.1 1.146	22.3 .878	28.25 1.112	4.5 .177	51.0 2.008	74.79 2.944	16.2 .638
BE62.3-1112CPHFR	4	35.1 1.382	28.3 1.114	33.85 1.333	4.5 .177	63.0 2.480	85.6 3.370	16.2 .638

* Please see the next page additionally.

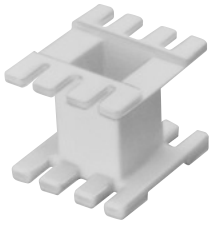


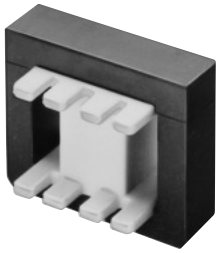
Type 4

* Please see the former page additionally.

t*	øP (mm)	P1 (mm)	P2 (mm)	P3 (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓw (mm)	Wt (g)	Accessory item
0.35 .014	0.6	2.5	5.0	7.0	6	8.3 8.0 8.0	5.3	19.9	0.26	—
0.40 .016	0.5	2.5	7.7	8.0	8	10.4 10.2 11.2	12.2	23.8	0.34	—
0.325 .013	0.6	(2.5, 2.6)	10.0	7.5	10	12.7 12.5 9.1	8.6	27.2	0.64	—
0.40 .016	0.6	2.5	10.0	8.5	10	13.2 12.7 12.3	22.2	31.3	0.63	—
0.375 .015	0.6	3.1	6.2	9.2	6	16.3 13.1 14.6	27.3	32.5	0.63	—
0.325 .013	0.6	3.0	9.0	11.0	8	16.5 14.6 13.6	26.7	33.1	0.84	—
0.55 .022	0.6	3.25	13.0	10.5	10	16.3 13.1 15.6	23.2	33.0	1.2	—
0.40 .016	0.6	3.3	13.2	11.0	10	16.3 14.1 16.3	33.1	37.1	1.0	—
0.35 .014	□0.5	4.0	8.0	12.5	6	20.3 16.7 16.2	36.4	36.8	0.95	—
0.80 .031	0.8	5.08	15.24	12.7	8	20.3 16.2 18.8	33.1	39.1	2.4	—
0.80 .031	0.8	5.0	15.0	12.5	8	22.3 17.1 20.1	20.0	38.6	2.3	—
0.80 .031	0.8	5.0	15.0	12.5	8	22.4 17.1 19.1	31.5	42.8	2.7	—
0.75 .030	0.8	5.0	15.0	12.5	8	25.8 18.1 20.5	42.5	49.4	3.5	—
0.80 .031	0.8	5.0	20.0	17.5	10	28.5 25.1 22.7	39.4	59.1	5.0	—
0.80 .031	0.8	5.0	20.0	20.0	10	30.4 25.1 28.6	44.5	61.0	4.9	FE-30-F FE-30-G
0.80 .031	0.8	5.0	25.0	20.0	12	30.4 25.1 28.6	43.2	58.0	6.2	
0.80 .031	0.8	5.0	25.0	22.5	12	33.5 28.1 31.2	88.8	72.3	6.8	—
0.80 .031	0.8	5.0	25.0	20.0	12	35.5 25.1 30.9	88.7	68.5	7.7	—
0.80 .031	1.0	5.0	25.0	25.0	12	40.5 30.2 35.8	108.0	76.0	9.7	FE-40-F FE-40-G
0.80 .031	1.0	5.0	25.0	22.5	12	40.5 30.2 35.7	108.1	75.6	9.8	
0.80 .031	1.0	7.5	37.5	27.5	12	50.7 36.2 43.6	170.0	94.0	17	FE-50-F FE-50-G
0.80 .031	1.0	7.5	37.5	35.0	12	50.8 45.2 45.1	294.0	113.0	29	FE-60-F FE-60-G
0.80 .031	0.9	7.5	37.5	60	12	52 77 16.2	96.05	76	16	—
0.80 .031	0.9	7.5	37.5	72.5	12	64 88 16.2	115.09	88	22	—

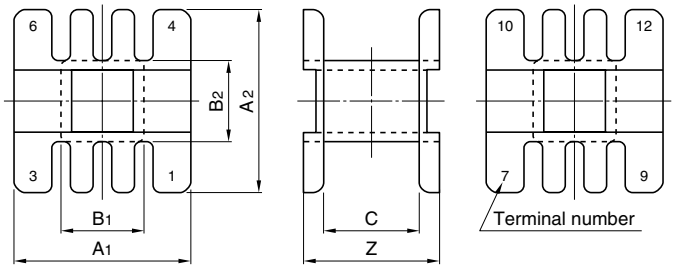
UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
** Minimum thickness of bobbin inside which core is placed, including flanges.*

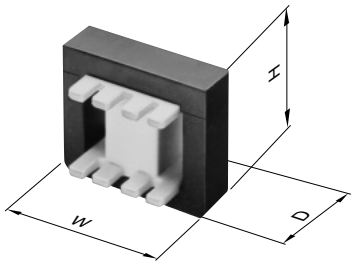




Part No.	Dimensions in mm inches					
	A_1	**A_2**	**B_1**	**B_2**	**C**	**Z**
BE-19-5116	13.7 .539	14.8 .583	6.4 .252	7.15 .281	9.33 .367	11.93 .470
BE-22-5116	12.5 .492	13.0 .512	7.7 .303	8.0 .315	8.68 .342	11.28 .444
BE-25-5116	18.1 .713	19.1 .752	8.7 .343	9.2 .362	10.2 .402	14.6 .575
BE-30-5112	18.85 .742	20.8 .819	13.0 .512	13.0 .512	13.95 .549	18.5 .728
BE-40-5112	26.35 1.037	29.1 1.146	14.4 .567	14.4 .567	17.6 .693	23.55 .927
BE-50-5112	32.75 1.289	35.55 1.400	17.4 .685	17.4 .685	22.1 .870	30.1 1.185
BE-60-5112	42.75 1.683	45.75 1.801	19.5 .768	19.5 .768	24.1 .949	34.1 1.343

* Please see the next page additionally.





Parameter						Accessory item
t*	**W D (mm) H**	**Aw (mm^2)**	**ℓ w (mm)**	**Wt (g)**	**Material**	
0.60 .024	20.3 14.9 16.2	35.7	37.9	0.55	6-Nylon	
0.575 .023	22.3 13.1 19.5	21.7	38.2	0.45	6-Nylon	
0.725 .029	25.8 19.2 18.7	47.6	50.6	1.3	6-Nylon	
0.60 .024	30.4 21.1 27.2	47.6	66.0	1.5	6-Nylon	FE-30-F FE-30-G
0.80 .031	40.5 29.4 35.3	110.0	85.0	3.8	6-Nylon	FE-40-F FE-40-G
0.80 .031	50.7 35.8 43.0	178.0	100.0	6.6	6-Nylon	FE-50-F FE-50-G
1.30 .051	60.8 46.0 45.0	289.0	128.0	15	6-Nylon	FE-60-F FE-60-G

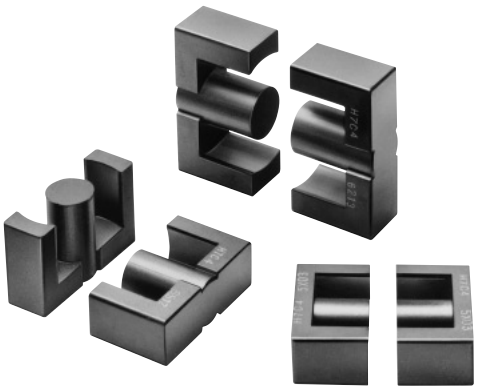
UL Grade: 94V-0

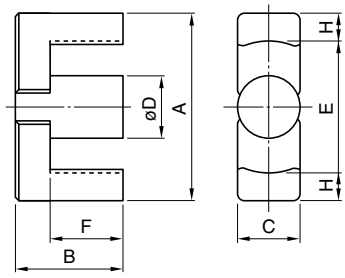
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".

** Minimum thickness of bobbin inside which core is placed, including flanges.*

* Please see the former page additionally.

EER Cores

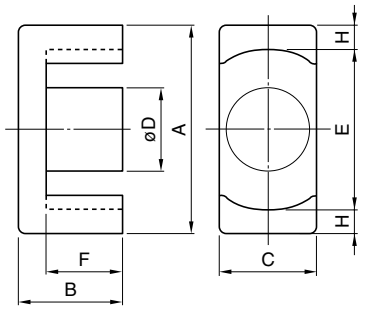




Type 1

Part No.	U.S. lam. cores, DIN standard JIS	Type	Dimensions in mm inches						
			A	B	C	D	E min.	F	H
PC40EER25.5-Z	JIS FEER25.5A	1	25.5±0.5 1.004±.020	9.3±0.2 .366±.008	7.5±0.2 .295±.008	7.5±0.15 .295±.006	19.8 .779	6.2±0.2 .244±.008	2.6 .102
PC40EER28-Z	JIS FEER28.5A	2	28.55±0.55 1.124±.022	14.0±0.2 .551±.008	11.4±0.25 .499±.010	9.9±0.25 .390±.010	21.2 .835	9.65±0.25 .380±.010	3.4 .134
PC40EER28L-Z	JIS FEER28.5B	2	28.55±0.55 1.124±.022	16.9±0.25 .665±.010	11.4±0.25 .499±.010	9.9±0.25 .390±.010	21.2 .835	12.53±0.28 .493±.011	3.4 .134
PC40EER35-Z	JIS FEER35A	1	35.0±0.5 1.378±.020	20.7±0.2 .815±.008	11.3±0.2 .445±.008	11.3±0.15 .445±.006	25.6 1.009	14.7±0.3 .579±.012	4.43 .174
PC40EER40-Z		1	40.0±0.5 1.575±.020	22.4±0.2 .882±.008	13.3±0.25 .524±.010	13.3±0.25 .524±.010	29.0 1.142	15.4±0.3 .606±.012	5.28 .208
PC40EER42-Z	JIS FEER42	1	42.0±0.6 1.654±.024	22.4±0.2 .882±.008	15.5±0.25 .610±.010	15.5±0.25 .610±.010	29.4 1.157	15.4±0.3 .606±.012	6.0 .236
PC40EER42/42/20-Z		2	42.15±0.65 1.659±.026	21.2±0.2 .835±.008	19.60±0.4 .772±.016	17.3±0.25 .681±.010	31.8 1.252	15.25±0.25 .600±.010	4.93 .194
PC40EER49-Z		1	49.0±0.8 1.929±.031	19.0±0.3 .748±.012	17.2±0.4 .677±.016	17.2±0.25 .677±.010	36.4 1.433	12.4±0.2 .488±.008	6.0 .236

* Please see the next page additionally.



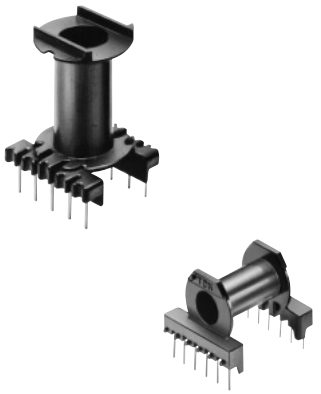
Type 2

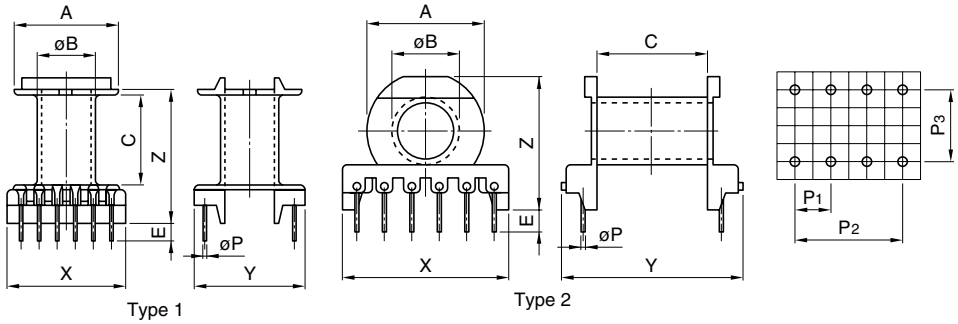
Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C_1 (mm^{-1})	**Ae (mm^2)**	**ℓe (mm)**	**Ve (mm^3)**	**A_L-value (nH/N^2)***		**Core loss (W) max.**		
				Without air gap	**With air gap**	**100kHz, 200mT, 100°C**		
1.08	44.8	48.2	2160	1920±25%	100±5% 200±7%	0.98	11	BEER25.5-118CPFR
0.780	82.1	64.0	5250	2870±25%	200±5% 400±7%	2.30	28	BEER28-1110CPFR BEER28-1112CPHFR
0.928	81.4	75.5	6150	2520±25%	160±5% 315±7%	2.70	33	BEER28L-1110CPFR BEER28L-1112CPHFR
0.849	107	90.8	9720	2770±25%	200±5% 400±7%	4.20	52	BEER35-1112CPFR BEER35-1116CPHFR
0.658	149	98.0	14600	3620±25%	200±5% 400±7%	6.30	78	BEER40-1112CPFR BEER40-1116CPHFR
0.509	194	98.8	19200	4690±25%	250±5% 500±7%	8.60	102	BEER42-1114CPFR BEER42-1116CPHFR
0.411	240	98.6	23700	5340±25%	250±5% 500±7%	10.7	116	BEER42/20-1112CPFR
0.395	231	91.3	21100	6250±25%	250±5% 500±7%	5.4**	110	BEER49-1118CPFR

* *A_L-value: 1kHz, 0.5mA, 100Ts*
** *Core loss: 100kHz, 150mT, 100°C*

* Please see the former page additionally.

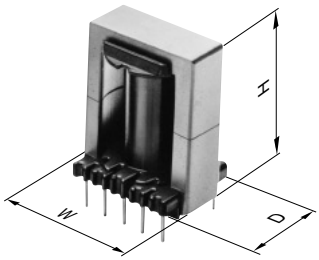
EER Bobbins

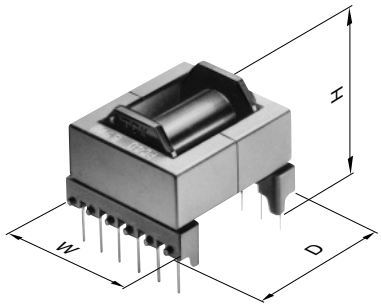




Part No.	Type	Dimensions in mm inches						
		A	**øB**	**C**	**E**	**X**	**Y**	**Z**
BEER25.5-118CPFR	1	19.53 .769	9.9 .390	10.05 .396	4.5 .177	22.0 .866	19.6 .772	19.05 .750
BEER28-1110CPFR	1	20.9 .823	12.3 .484	16.7 .657	4.5 .177	24.8 .976	23.0 .906	26.6 1.047
BEER28L-1110CPFR	1	20.9 .823	12.3 .484	22.4 .882	4.5 .177	24.8 .976	23.0 .906	32.3 1.272
BEER35-1112CPFR	1	25.4 1.000	13.7 .539	26.1 1.028	5.5 .217	30.0 1.181	28.5 1.122	39.3 1.547
BEER40-1112CPFR	1	28.7 1.130	15.8 .622	27.5 1.083	5.0 .197	32.0 1.260	30.0 1.181	41.7 1.642
BEER42-1114CPFR	1	29.1 1.146	17.95 .707	27.5 1.083	5.0 .197	38.0 1.496	30.0 1.181	42.7 1.681
BEER42/20-1112CPFR	1	31.5 1.240	19.8 .780	27.3 1.075	5.0 .197	43.5 1.713	37.0 1.457	42.5 1.673
BEER49-1118CPFR	1	35.95 1.415	20.3 .799	21.45 .844	4.5 .177	49.0 1.929	37.0 1.457	39.45 1.553
BEER28-1112CPHFR	2	20.9 .823	12.0 .472	16.1 .634	5.0 .197	30.0 1.181	31.3 1.232	25.0 .984
BEER28L-1112CPHFR	2	20.9 .823	12.0 .472	21.8 .858	5.0 .197	30.0 1.181	37.0 1.457	25.0 .984
BEER35-1116CPHFR	2	25.2 .992	13.6 .535	26.4 1.039	4.5 .177	40.0 1.575	45.5 1.791	29.0 1.142
BEER40-1116CPHFR	2	28.6 1.126	15.7 .618	27.5 1.083	4.2 .165	40.0 1.575	44.0 1.732	31.8 1.252
BEER42-1116CPHFR	2	29.0 1.142	18.0 .709	27.3 1.075	5.0 .197	40.0 1.575	44.0 1.732	34.5 1.358

* Please see the next page additionally.

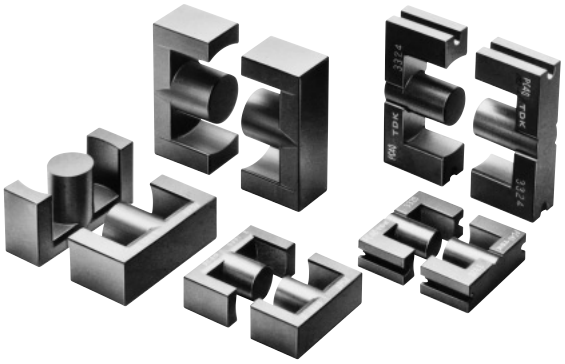


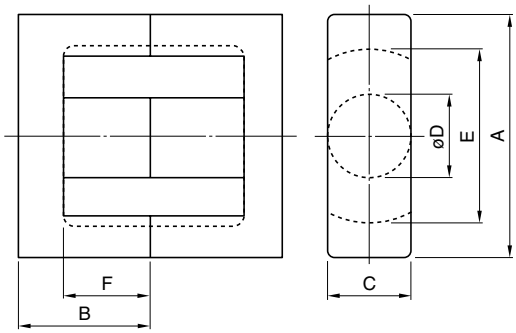


							Parameter		Wt
t*	øP (mm)	P_1 (mm)	P_2 (mm)	P_3 (mm)	Terminal pins	W D (mm) H	Aw (mm^2)	ℓw (mm)	(g)
0.8	0.8	5.0	15	12.5	8	26 20 21	48.4	46.2	2.7
0.8	0.8	5.0	20	17.5	10	29 23 29	71.8	52.2	3.5
0.8	0.8	5.0	20	17.5	10	29 23 35	96.3	52.2	3.9
0.8	1.0	5.0	25	22.5	12	36 29 44	152.7	61.4	7.7
0.8	1.0	5.0	25	25	12	41 30 46	178.8	69.9	8.9
0.8	1.0	5.0	30	25	14	43 30 47	153.3	73.9	9.8
0.8	1.0	7.5	37.5	30	12	43 37 46	159.7	80.6	12
0.9	0.8	5.0	40	30	18	50 37 43	167.8	88.4	15
0.8	0.8	5.0	25	25	12	31 32 26	71.6	51.6	5.2
0.8	0.8	5.0	25	30	12	31 38 26	97.0	51.7	5.5
0.8	□0.75	5.0	35	35	16	41 46 31	154.4	60.8	11
0.8	1.0	5.0	35	35	16	41 45 32	170.6	69.9	11
0.8	1.0	5.0	35	35	16	43 46 35	148.5	73.8	12

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

* Please see the former page additionally.

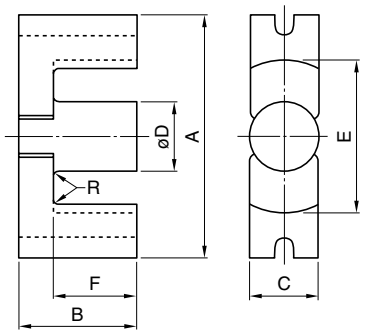




Type 1

Part No.	JIS	Type	Dimensions in mm inches					
			A	B	C	øD	E	F
PC40ETD19-Z		1	19.6±0.5 .771±.020	13.65±0.15 .537±.006	7.4±0.2 .291±.008	7.4±0.2 .291±.008	14.9±0.5 .586±.020	9.4±0.2 .370±.008
PC40ETD24-Z		1	24.4±0.6 .960±.024	14.45±0.15 .569±.006	8.5±0.4 .335±.016	8.5±0.2 .335±.008	18.6±0.6 .732±.024	10.1±0.2 .398±.008
PC40ETD29-Z		1	29.8±0.8 1.173±.031	15.80±0.15 .622±.006	9.5±0.3 .374±.012	9.5±0.3 .374±.012	22.7±0.7 .893±.028	11.0±0.3 .433±.012
PC40ETD34-Z	JIS FEER 34.2	1	34.2±0.8 1.346±.031	17.3±0.2 .681±.008	10.88±0.38 .428±.015	10.8±0.3 .425±.012	26.3±0.7 1.035±.028	12.1±0.3 .476±.012
PC40ETD39-Z	JIS FEER 39.1	1	39.1±0.9 1.539±.035	19.8±0.2 .780±.008	12.58±0.38 .495±.015	12.5±0.3 .492±.012	30.1±0.8 1.185±.031	14.6±0.4 .575±.016
PC40ETD44-Z	JIS FEER 44	1	44.0±1.0 1.732±.039	22.3±0.2 .878±.008	14.9±0.5 .587±.020	14.8±0.4 .583±.016	33.3±0.8 1.311±.031	16.5±0.4 .650±.016
PC40ETD49-Z	JIS FEER 48.7	1	48.7±1.1 1.917±.043	24.7±0.2 .972±.008	16.4±0.5 .646±.020	16.3±0.4 .642±.016	37.0±0.9 1.457±.035	18.1±0.4 .713±.016
PC40EC70-Z		2	70.0±1.7 2.756±.067	34.5±0.15 1.358±.006	16.4±0.4 .646±.016	16.4±0.4 .646±.016	44.5±1.2 1.752±.047	22.75±0.45 .896±.018
PC40EC90-Z		2	90.0±1.8 3.543±.071	45.0±1.3 1.772±.051	30.0±1.0 1.181±.039	30.0±1.0 1.181±.039	70.0±1.5 2.756±.059	35.5±0.5 1.398±.020
PC40EC120-Z		2	120±2.0 4.724±.079	50.5±1.0 1.988±.039	30.0±1.0 1.181±.039	30.0±1.0 1.181±.039	95.0±1.7 3.740±.067	35.5±0.5 1.398±.020

* Please see the next page additionally.

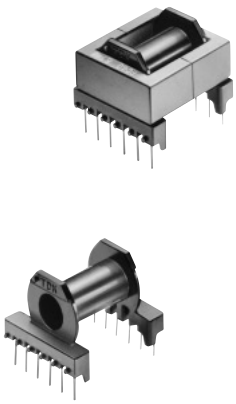


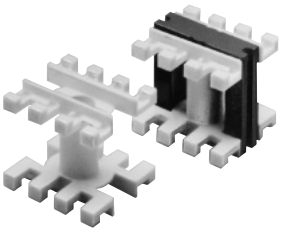
Type 2

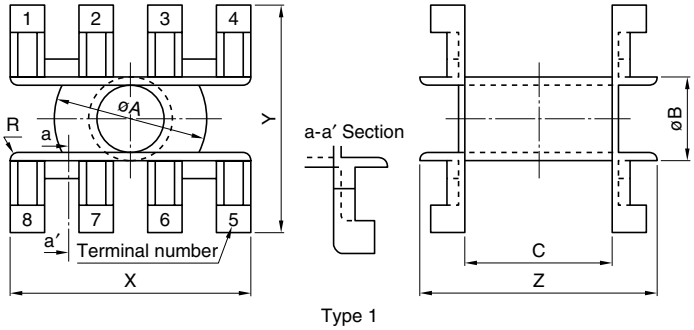
Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C_1 (mm^{-1})	**Ae (mm^2)**	**ℓ e (mm)**	**Ve (mm^3)**	**A_L-value (nH/N^2)***		**Core loss (W) max.**		
				Without air gap	**With air gap**	**100kHz, 200mT, 100°C**		
1.32	41.3	54.6	2260	1720±25%	80±5% 160±7%	1.1	14	BETD19-1111CPHFR
1.100	56.3	61.9	3480	2125±25%	100±5% 200±7%	1.6	20	BETD24-1112CPHFR
0.959	73.6	70.6	5170	2500±25%	200±5% 400±10%	2.4	28	—
0.810	97.1	78.6	7630	2780±25%	200±5% 400±7%	3.31	40	—
0.737	125	92.1	11500	3150±25%	200±5% 400±7%	5.3	60	—
0.589	175	103	18000	4000±25%	250±5% 400±7%	8.3	94	—
0.535	213	114	24300	4440±25%	250±5% 400±7%	11.2	124	—
0.514	279	144	40100	4800±25%	100±5% 200±5%	14.0	256	BEC-70-5116
0.346	624	216	135000	6000 min.		2.8**	698	BEC-90-0112
0.332	753	250	188250	6300 min.		3.5**	780	—

* *A_L-value: 1kHz, 0.5mA, 100Ts*
** *Core loss: 25kHz, 200mT, 100°C*

* Please see the former page additionally.







Type 1

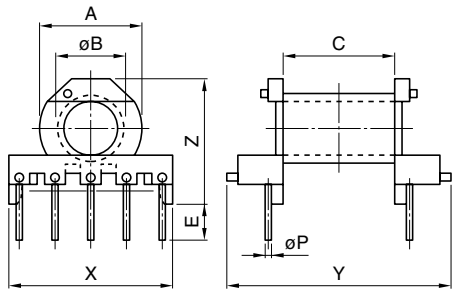
Part No.	Type	Dimensions in mm inches					
		øA	**øB**	**C**	**X**	**Y**	**Z**
BEC-70-5116	1	42.7 1.681	19.5 .768	41.45 1.632	70.0 2.756	56.25 2.214	57.8 2.276
BEC-90-0112	1	67.6 2.661	35.4 1.394	65.3 2.571	80.0 3.150	77.0 3.031	89.8 3.535

Part No.	Type	Dimensions in mm inches						
		øA	**øB**	**C**	**E**	**X**	**Y**	**Z**
BETD19-1111CPHFR	2	14.0 .551	9.7 .382	16.0 .630	5.0 .197	23.4 .921	31.0 1.220	18.15 .715
BETD24-1112CPHFR	2	17.5 .689	10.9 .429	17.2 .677	5.0 .197	29.0 1.142	33.6 1.223	21.65 .852

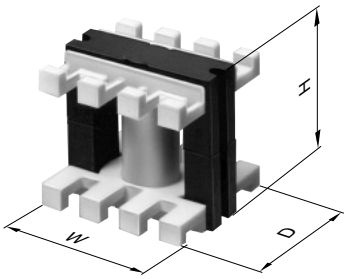
* Please see the next page additionally.

Bobbin-core assembly dimensions

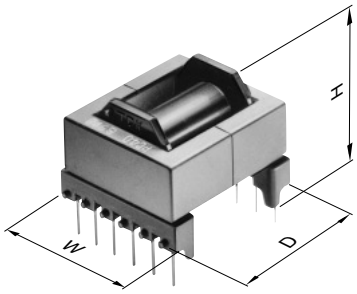
EC cores



Type 2



ETD cores



t*	W D (mm) H	Parameter Aw (mm²)	Parameter ℓ w (mm)	Wt (g)	Material	Accessory item
1.13	72 57 70	471.4	98	18	6-Nylon	—
1.90	92 77 93	1046.5	162	82	6-Nylon	—

* Please see the former page additionally.

t*	øP (mm)	P1 (mm)	P2 (mm)	P3 (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓ w (mm)	Wt (g)
0.9	0.8	5.08	20.32	20.32	10	23.55 31.0 18.15	37.3	33.2	3.3
0.9	0.8	5.08	25.4	22.86	12	29.0 33.6 21.65	44.7	55.5	4.8

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

Original TDK Cores

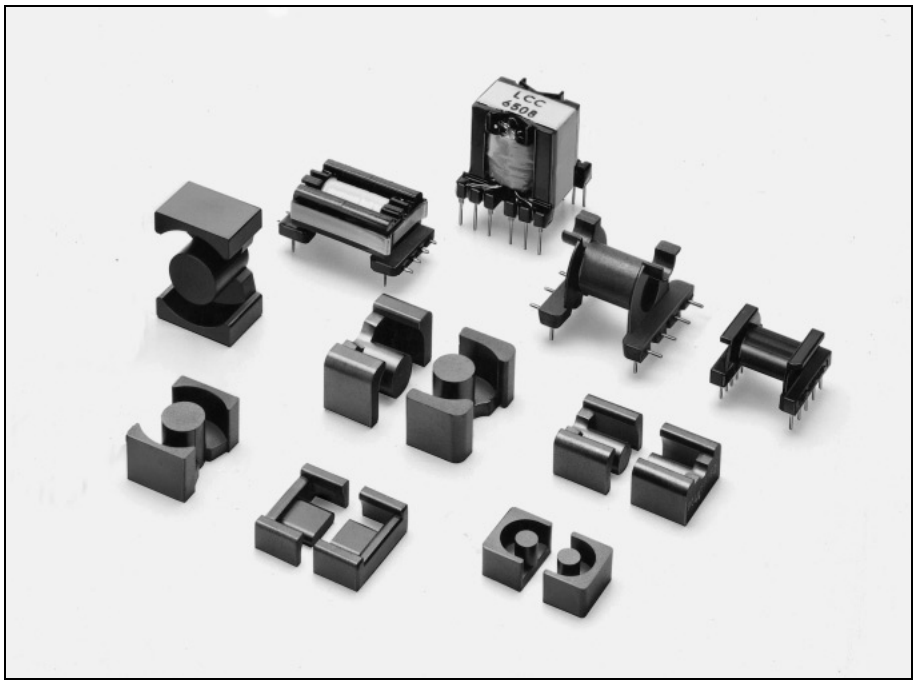
Cores

PQ20/16 to PQ50/50
LP23/8 to LP32/13
EPC10 to EPC30
EP7 to EP20

Bobbins

BPQ20/16 to BPQ50/50
BLP23/8 to BLP32/13
BEPC10 to BEPC30
BEP7 to BEP20

Accessories



Ordering Code System

Cores

PC44 PQ 26/25 Z – 12

- PC44: Material
- PQ 26/25: Size of PQ core
- Z: AL-value Z: without air gap; G□: with air gap
- 12: Number of Lead Slot
- Type

Bobbins

B PQ 26/25 – 1112CPFR

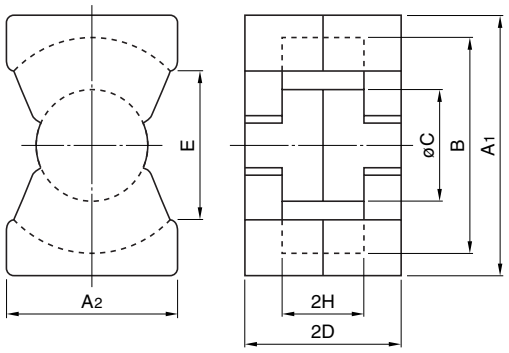
- B: Symbol of Bobbin
- PQ 26/25: Size of PQ core
- 1: Code of Bobbin Material
- 1: Number of Section
- 2: Number of Terminal Pin
- CPFR: Type of Terminal Pin

Accessories

F PQ 26/25 – A

- F: Symbol of Accessory
- PQ 26/25: Size of PQ core
- A: Type of Accessory

DE. PAT. 2,944,583
DE. DES. 15,655
EP. PAT. 26,104(DE, FR, GB, NL)
GB. PAT. 2,035,706
GB. DES. 990,685
JP. U. M 1,589,580
JP. U. M 1,621,895
JP. U. M PUB.
85(60)-3556 1,647,781
JP. U. M PUB.
86(61)-5779 1655608
JP. DES. 580,081
JP. DES. 649,618
KR. U. M 23,487
NL. PAT. 178,826
NL. DES. 5,777
US. PAT. 4,352,080
US. DES. 264,959



Part No.	Dimensions in mm inches						
	A_1	**A_2**	**B**	**øC**	**2D**	**E min.**	**2H**
PC44PQ20/16Z-12	20.5±0.4 .807±.016	14.0±0.4 .551±.016	18.0±0.4 .709±.016	8.8±0.2 .346±.008	16.2±0.2 .638±.008	12.0 .472	10.3±0.3 .406±.012
PC44PQ20/20Z-12	20.5±0.4 .807±.016	14.0±0.4 .551±.016	18.0±0.4 .709±.016	8.8±0.2 .346±.008	20.2±0.2 .795±.008	12.0 .472	14.3±0.3 .563±.012
PC50PQ20/20Z-12	20.5±0.4 .807±.016	14.0±0.4 .551±.016	18.0±0.4 .709±.016	8.8±0.2 .346±.008	20.2±0.2 .795±.008	12.0 .472	14.3±0.3 .563±.012
PC44PQ26/20Z-12	26.5±0.45 1.043±.018	19.0±0.45 .748±.018	22.5±0.45 .886±.018	12.0±0.2 .472±.008	20.15±0.25 .793±.010	15.5 .610	11.5±0.3 .453±.012
PC44PQ26/25Z-12	26.5±0.45 1.043±.018	19.0±0.45 .748±.018	22.5±0.45 .886±.018	12.0±0.2 .472±.008	24.75±0.25 .974±.010	15.5 .610	16.1±0.3 .634±.012
PC50PQ26/25Z-12	26.5±0.45 1.043±.018	19.0±0.45 .748±.018	22.5±0.45 .886±.018	12.0±0.2 .472±.008	24.75±0.25 .974±.010	15.5 .610	16.1±0.3 .634±.012
PC44PQ32/20Z-12	32.0±0.5 1.260±.020	22.0±0.5 .866±.020	27.5±0.5 1.083±.020	13.45±0.25 .530±.010	20.55±0.25 .809±.010	19.0 .748	11.5±0.3 .453±.012
PC44PQ32/30Z-12	32.0±0.5 1.260±.020	22.0±0.5 .866±.020	27.5±0.5 1.083±.020	13.45±0.25 .530±.010	30.35±0.25 1.195±.010	19.0 .748	21.3±0.3 .839±.012
PC44PQ35/35Z-12	35.1±0.6 1.382±.024	26.0±0.5 1.024±.020	32.0±0.5 1.260±.020	14.35±0.25 .565±.010	34.75±0.25 1.368±.010	23.5 .925	25.0±0.3 .984±.012
PC44PQ40/40Z-12	40.5±0.9 1.594±.035	28.0±0.6 1.102±.024	37.0±0.6 1.457±.024	14.9±0.3 .587±.012	39.75±0.25 1.565±.010	28.0 1.102	29.5±0.3 1.161±.012
PC44PQ50/50Z-12	50.0±0.7 1.969±.028	32.5±0.5 1.260±.020	44.0±0.7 1.732±.028	20.0±0.35 .787±.014	49.95±0.25 1.967±.010	31.5 1.240	36.1±0.3 1.421±.012

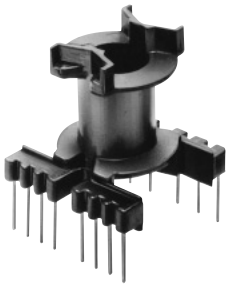
* Please see the next page additionally.

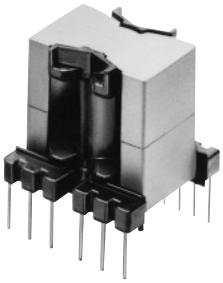
* Please see the former page additionally.

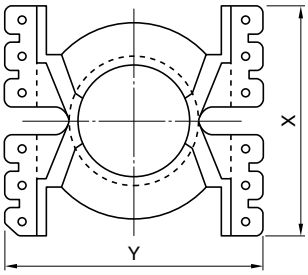
Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C[1] (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	AL-value (nH/N^2)* Without air gap	With air gap	Core loss (W) max. 100kHz, 200mT, 100°C		
0.603	62	37.4	2320	3880±25%	100±5% 250±7% 400±10%	0.84	13	BPQ20/16-1114CPFR
0.732	62	45.4	2810	3150±25%	100±5% 250±7% 400±10%	1.02	15	BPQ20/20-1114CPFR
0.732	62	45.4	2810	2000±25%	100±5% 160±5% 250±7%	0.33***	15	BPQ20/20-1114CPFR
0.389	119	46.3	5510	6170±25%	160±5% 315±5% 630±10%	1.94	31	BPQ26/20-1112CPFR
0.470	118	55.5	6550	5250±25%	160±5% 315±5% 630±10%	2.32	36	BPQ26/25-1112CPFR
0.470	118	55.5	6550	3200±25%	100±5% 250±5% 400±7%	0.76***	36	BPQ26/25-1112CPFR
0.326	170	55.5	9440	7310±25%	160±5% 315±5% 630±7%	2.92	42	BPQ32/20-1112CPFR
0.463	161	74.6	12000	5140±25%	160±5% 315±5% 630±7%	3.92	55	BPQ32/30-1112CPFR
0.448	196	87.9	17200	4860±25%	160±5% 315±5% 630±7%	5.27	73	BPQ35/35-1112CPFR
0.507	201	102	20500	4300±25%	160±5% 315±5% 630±7%	6.56	95	BPQ40/40-1112CPFR
0.346	328	113	37238	6720±25%	250±5% 400±5% 630±5%	6.10**	195	BPQ50/50-1112DSFR

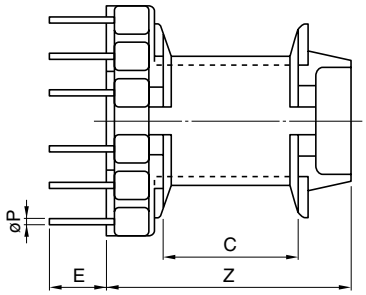
** AL-value: 1kHz, 0.5mA, 100Ts*
*** Core loss: 100kHz, 150mT, 100°C*
**** Core loss: 500kHz, 50mT, 100°C*

Bobbins



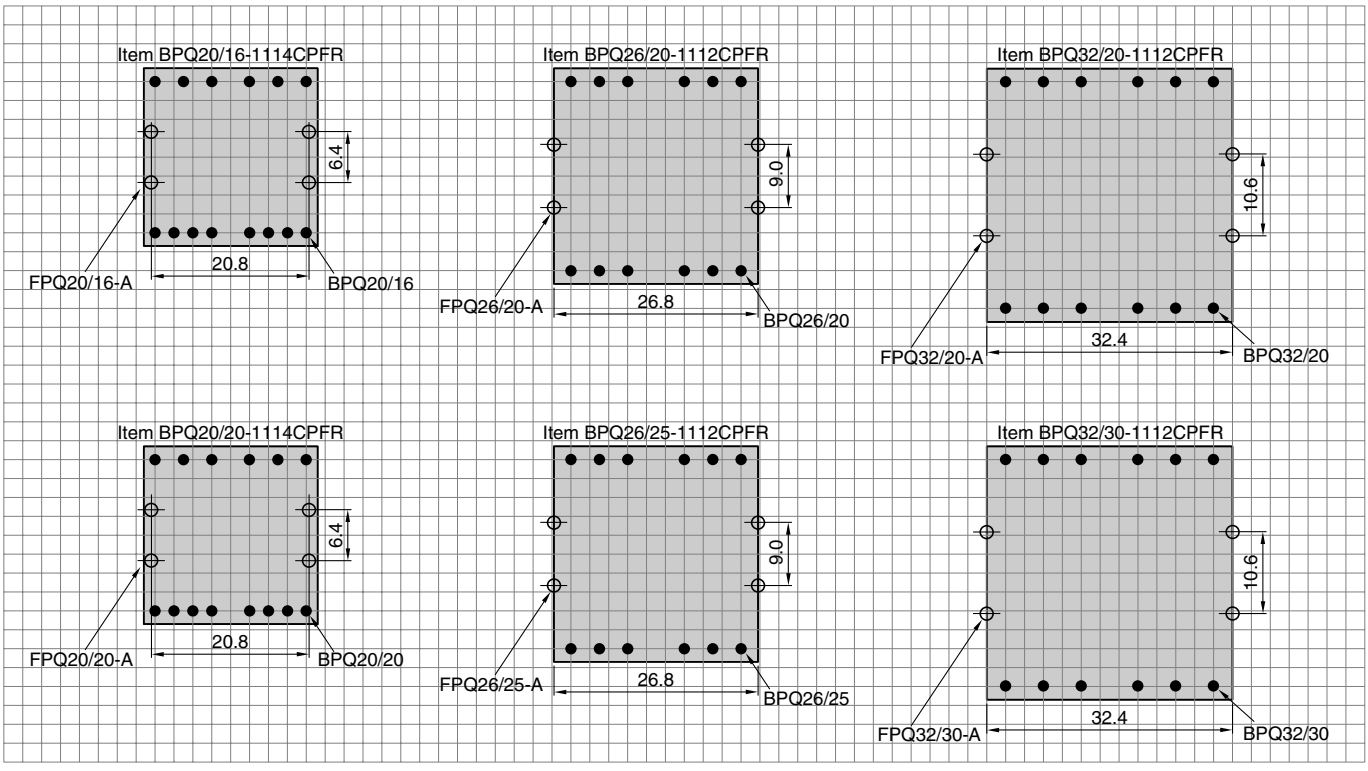




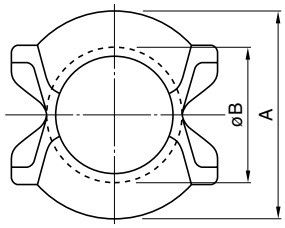


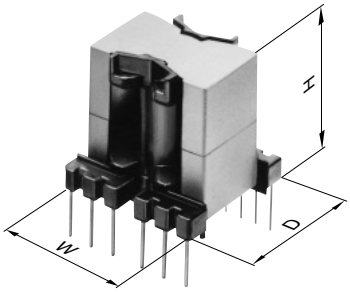
Part No.	Dimensions in mm / inches						
	A	**øB**	**C**	**E**	**X**	**Y**	**Z**
BPQ20/16-1114CPFR	17.2 .677	10.95 .431	8.0 .315	6.5 .256	23.0 .906	23.0 .906	18.3 .720
BPQ20/20-1114CPFR	17.2 .677	10.95 .431	12.0 .472	6.5 .256	23.0 .906	23.0 .906	22.3 .878
BPQ26/20-1112CPFR	21.6 .850	14.3 .563	9.2 .362	6.5 .256	26.5 1.043	29.3 1.154	21.5 .846
BPQ26/25-1112CPFR	21.6 .850	14.3 .563	13.9 .547	3.5 .138	26.5 1.043	29.3 1.154	29.1 1.146
BPQ32/20-1112CPFR	26.6 1.047	16.0 .630	9.0 .354	7.0 .276	32.0 1.260	34.0 1.339	22.5 .886
BPQ32/30-1112CPFR	26.6 1.047	16.0 .630	18.6 .732	7.0 .276	32.0 1.260	34.0 1.339	32.1 1.264
BPQ35/35-1112CPFR	31.1 1.224	16.9 .665	22.4 .882	7.5 .295	35.0 1.378	39.0 1.535	37.4 1.472
BPQ40/40-1112CPFR	36.0 1.417	17.5 .689	26.8 1.055	6.5 .256	40.0 1.575	42.0 1.654	44.8 1.764
BPQ50/50-1112DSFR	42.9 1.689	23.2 .913	32.4 1.276	10.0 .394	51.0 2.008	51.0 2.008	52.0 2.047

Connecting Pin Patterns (2.54mm/0.1 inch grids) View in mounting direction



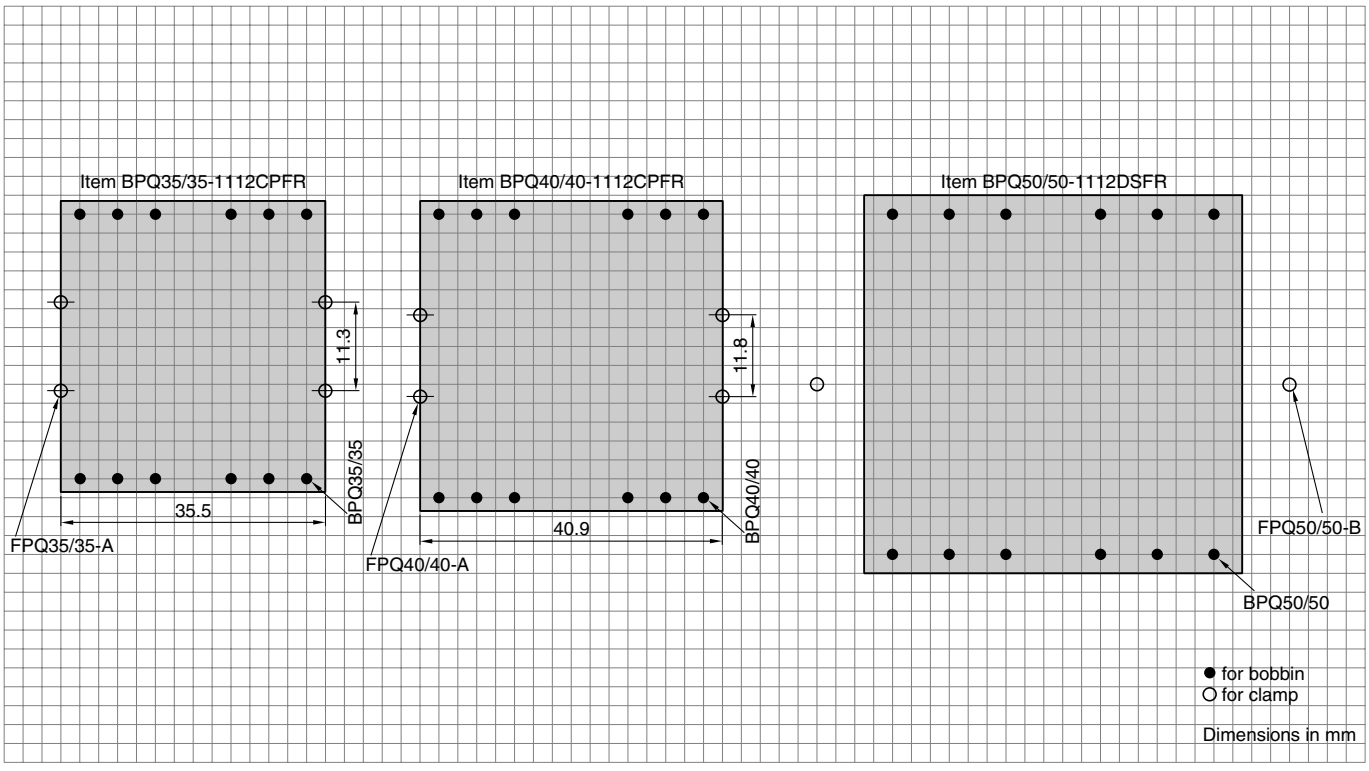
* Please see the next page additionally.





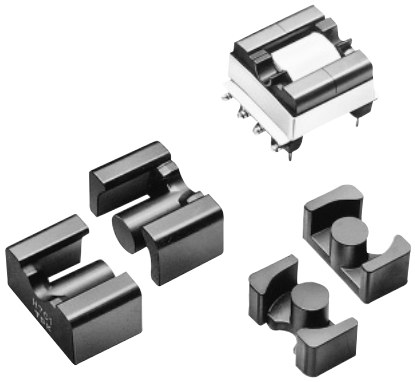
t*	øP (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓ w (mm)	Wt (g)	Accessory item
0.8	0.6	14	23.0 23.0 18.3	23.4	44	2.7	FPQ20/16-A
0.8	0.6	14	23.0 23.0 22.3	36.2	44	2.8	FPQ20/20-A
0.8	0.8	12	26.5 29.3 21.5	30.7	56.2	4.3	FPQ26/20-A
0.8	0.8	12	26.5 29.3 29.1	47.7	56.2	4.9	FPQ26/25-A
0.9	1.0	12	32.0 34.0 22.5	42.9	67.1	6.6	FPQ32/20-A
0.9	1.0	12	32.0 34.0 32.1	95.3	67.1	7.4	FPQ32/30-A
0.9	1.0	12	35.0 39.0 37.4	154.2	75.2	11	FPQ35/35-A
0.9	1.0	12	40.0 42.0 44.8	240.0	83.9	14	FPQ40/40-A
1.0	1.2	12	51.0 51.0 52.0	313.0	104	22	FPQ50/50-B

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

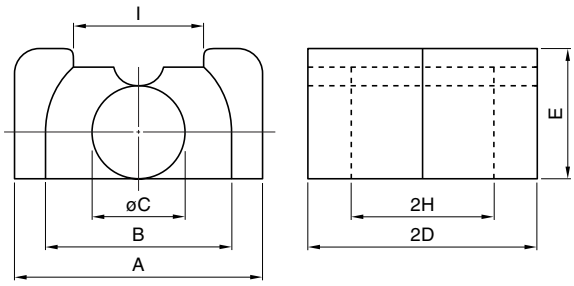


* Please see the former page additionally.

Cores

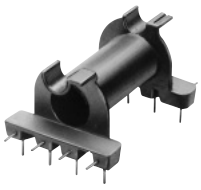


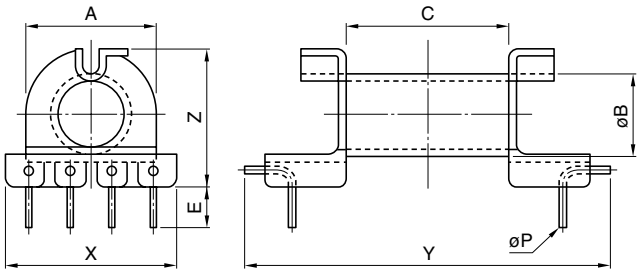
DE. DES. 19,581
EP. PAT. 68,745(DE, FR, GB, NL)
FR. DES. 201,586
GB. DES. 1,007,200
JP. U. M PRO. PUB. 82(57)-201,824
JP. DES. 630,754
NL. DES. 9,767
US. PAT. 4,424,504
US. DES. 280,810



Part No.	Dimensions in mm inches						
	A	**B**	**øC**	**2D**	**E**	**2H**	**I**
PC44LP23/8Z-12	16.5±0.3 .650±.012	12.5±0.3 .492±.012	5.7±0.1 .224±.004	23.4±0.2 .921±.008	8.7±0.2 .343±.008	17.4±0.2 .685±.008	9.0±0.5 .354±.020
PC44LP22/13Z-12	25.0±0.4 .984±.016	19.0±0.3 .748±.012	8.6±0.2 .339±.008	22.4±0.2 .882±.008	12.9±0.3 .508±.012	16.4±0.3 .646±.012	13.5±0.5 .531±.020
PC44LP32/13Z-12	25.0±0.4 .984±.016	19.0±0.3 .748±.012	8.6±0.2 .339±.008	31.8±0.2 1.252±.008	12.9±0.3 .508±.012	24.1±0.3 .949±.012	13.5±0.5 .531±.020

Bobbins



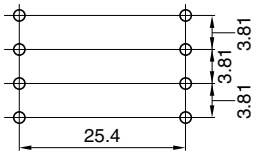


Type 1

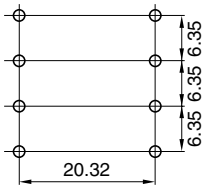
Part No.	Type	Dimensions in mm inches						
		A	**B**	**C**	**E**	**X**	**Y**	**Z**
BLP23/8-018CPLFR	1	12.0 .472	7.7 .303	15.2 .598	4.0 .157	16.5 .650	34.0 1.358	12.5 .492
BLP22/13-018CPLFR	1	17.6 .693	10.7 .421	14.1 .555	4.0 .157	25.0 .984	31.5 1.240	17.6 .693
BLP22/13-1110CPLFR*	2	17.6 .693	10.78 .424	13.4 .528	4.0 .157	25.0 .984	32.3 1.272	19.1 .752
BLP32/13-018CPLFR	1	17.6 .693	10.7 .421	21.8 .858	4.0 .157	25.0 .984	40.4 1.591	17.6 .693
BLP32/13-1110CPLFR*	2	17.6 .693	10.82 .426	21.1 .835	4.0 .157	25.0 .984	40.6 1.598	19.1 .752

* *Include 2 pieces of insulating dividers (see next page).*

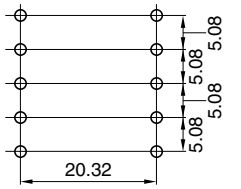
Pin layout
Item BLP23/8-018CPLFR



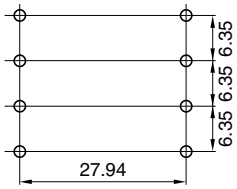
Pin layout
Item BLP22/13-018CPLFR



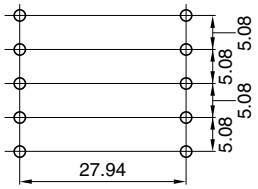
Pin layout
Item BLP22/13-1110CPLFR



Pin layout
Item BLP32/13-018CPLFR



Pin layout
Item BLP32/13-1110CPLFR



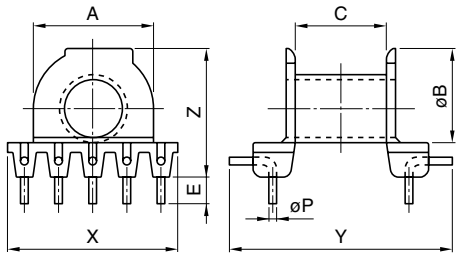
Dimensions in mm

* Please see the next page additionally.

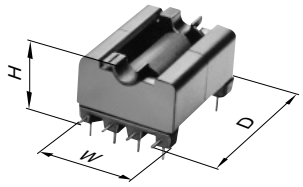
* Please see the former page additionally.

Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	A_L-value (nH/N^2)* Without air gap	With air gap	Core loss (W) max. 100kHz, 200mT, 100°C		
1.41	31.3	44.1	1380	1600±25%	63±5% 100±7% 250±13%	0.42	9.6	BLP23/8-018PFR
0.721	67.9	49.0	3330	3310±25%	100±5% 200±7% 400±10%	1.05	21	BLP22/13-1110CPLFR
0.909	70.3	64.0	4500	2630±25%	100±5% 200±7% 400±10%	1.38	30	BLP32/13-1110CPLFR

* *A_L-value: 1kHz, 0.5mA, 100Ts*



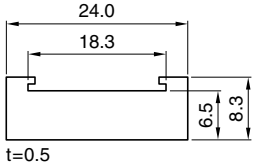
Type 2



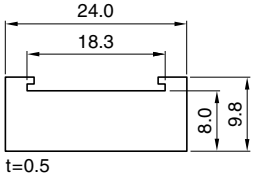
Parameter						Wt (g)	Material	Clamp item
t*	øP (mm)	Terminal pins	W D (mm) H	Aw (mm^2)	ℓw (mm)			
0.8	0.6	8	17.2 34.2 12.5	31.9	30.9	1.9	PPS	FLP23/8-A
0.8	0.8	8	27 32 17.8	51.5	45.8	3.2	PPS	FLP22/13-A
0.8	0.8	10	25.9 32.3 19.2	45.7	44.5	3.1	FR Phenol	FLP22/13-A
0.8	0.8	8	27 41 17.8	79.6	45.8	3.7	PPS	FLP32/13-A
0.8	0.8	10	25.9 40.6 19.2	72.0	44.5	3.7	FR Phenol	FLP32/13-A

UL Grade: 94V-0, Pin material: Phosphor bronze wire/Steel wire for "-1110-CPLFR" (Solder plated), Insulating divider's material: NOMEX®
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

Insulating divider for BLP22/13-1110CPLFR
Part No.: ILP22/13

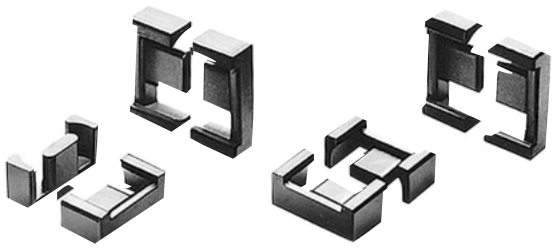


Insulating divider for BLP32/13-1110CPLFR
Part No.: ILP32/13

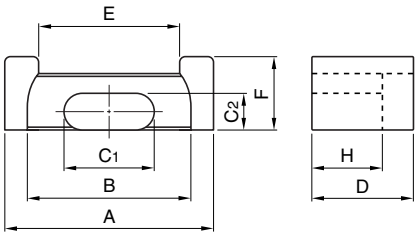


Dimensions in mm

Cores



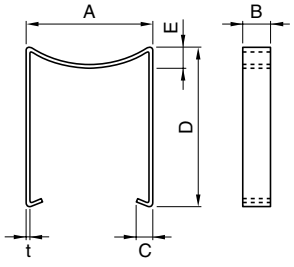
US. PAT. 4,760,366
EP. PAT. 245,083(DE, FR, GB, NL)
KS. UM 50,836
TW. UM 39,406
JP. PENDING



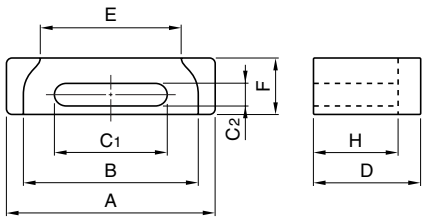
Type 1

Part No.	Type	Dimensions in mm inches						
		A	B min.	C_1	C_2	D	E min.	F
PC44EPC10-Z **PC50EPC10-Z**	3	10.2±0.2 .402±.008	7.6 .299	5.0±0.1 .197±.004	1.9±0.1 .075±.004	4.05±0.10 .159±.004	5.3 .209	3.4±0.1 .139±.004
PC44EPC13-Z **PC50EPC13-Z**	1	13.25±0.30 .522±.012	10.5 .413	5.60±0.15 .220±.006	2.05±0.10 .081±.004	6.6±0.2 .026±.008	8.3 .327	4.60±0.15 .181±.006
PC44EPC17-Z **PC50EPC17-Z**	1	17.6±0.4 .693±.016	14.3 .563	7.70±0.15 .303±.006	2.8±0.1 .110±.004	8.55±0.20 .337±.008	11.5 .453	6.00±0.15 .236±.006
PC44EPC19-Z **PC50EPC19-Z**	1	19.1±0.4 .752±.016	15.8 .622	8.50±0.15 .335±.006	2.5±0.1 .098±.004	9.75±0.20 .384±.008	13.1 .516	6.00±0.15 .236±.006
PC44EPC25-Z **PC50EPC25-Z**	1	25.1±0.5 .988±.020	20.65 .813	11.5±0.2 .453±.008	4.0±0.1 .157±.004	12.5±0.2 .492±.008	17.1 .673	8.0±0.2 .315±.008
PC44EPC25B-Z **PC50EPC25B-Z**	2	25.1±0.5 .988±.020	20.4 .803	13.8±0.2 .543±.008	2.50±0.15 .098±.006	11.4±0.15 .449±.006	16.5 .650	6.5±0.2 .266±.008
PC44EPC27-Z **PC50EPC27-Z**	1	27.1±0.5 1.067±.020	21.6 .850	13.0±0.3 .512±.012	4.0±0.1 .157±.004	16.0±0.2 .630±.008	18.5 .728	8.0±0.2 .315±.008
PC44EPC27N-Z	4	27.0±0.4 1.063±.016	20.8 .819	13.85±0.15 .545±.006	2.2±0.1 .087±.004	13.0±0.1 .512±.004	19.0 .748	5.1±0.1 .201±.004
PC44EPC30-Z **PC50EPC30-Z**	1	30.1±0.5 1.185±.020	23.6 .929	15.0±0.3 .591±.012	4.0±0.1 .157±.004	17.5±0.2 .689±.008	20.0 .787	8.0±0.2 .315±.008

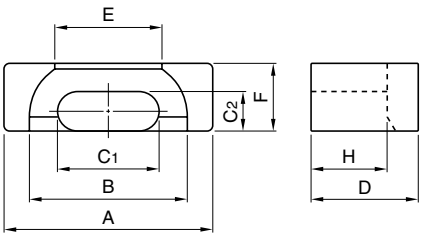
Accessory Part No.	Dimensions in mm inches						
	A	B	C	D	E	t	Material
FEPC-10-A	10.8 .425	2.8 .110	1.5 .059	8.0 .315	0.8 .031	0.2 .008	Stainless steel
FEPC-13-A	13.7 .541	2.8 .110	2.9 .114	14.75 .581	2.65 .104	0.25 .010	Stainless steel
FEPC-17-A	18.1 .713	3.8 .150	2.9 .114	19.1 .752	3.0 .118	0.3 .012	Stainless steel
FEPC-19-A	19.9 .783	3.8 .150	2.9 .114	21.5 .846	3.0 .118	0.3 .012	Stainless steel
FEPC-25-A	26.0 1.024	5.6 .220	2.9 .114	27.0 1.063	3.0 .118	0.3 .012	Stainless steel
FEPC-25B-A	26.0 1.024	5.0 .197	2.9 .114	24.5 .965	3.0 .118	0.3 .012	Stainless steel
FEPC-27-A	28.0 1.102	5.6 .220	2.9 .114	34.0 1.339	3.0 .118	0.3 .012	Stainless steel
FEPC-30-A	31.0 1.220	5.6 .220	2.9 .114	37.0 1.457	3.0 .118	0.3 .012	Stainless steel



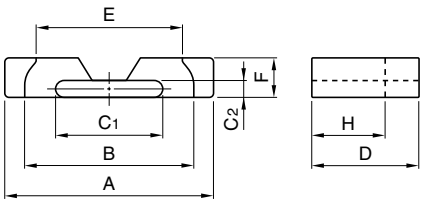
* Please see the next page additionally.



Type 2



Type 3

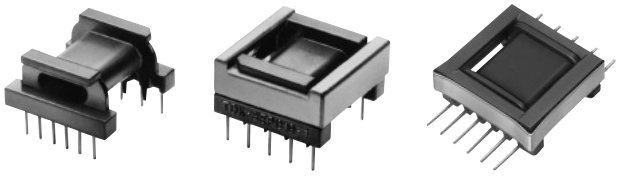


Type 4

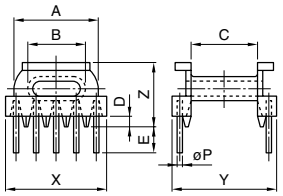
* Please see the former page additionally.

H	Effective parameter C1 (mm⁻¹)	Ae (mm²)	ℓe (mm)	Ve (mm³)	Electrical characteristics AL-value (nH/N²)* Without air gap	With air gap	Core loss (W) max. 100kHz, 200mT, 100°C	Wt (g)	Bobbin item
2.65±0.10 .104±.004	1.89	9.39	17.8	167	1000±25% 660±25%	40±7% 63±10%	0.072 0.025**	1.1	BEPC10-118GAFR
4.5±0.2 .177±.008	2.45	12.5	30.6	382	870±25% 560±25%	40±4% 63±5%	0.14 0.039**	2.1	BEPC13-1110CPHFR BEPC13-1110GAFR
6.05±0.20 .238±.008	1.76	22.8	40.2	917	1150±25% 740±25%	80±4% 125±5%	0.35 0.1**	4.5	BEPC17-1110CPHFR BEPC17-119GAFR
7.25±0.20 .285±.008	2.03	22.7	46.1	1050	940±25% 680±25%	80±4% 125±5%	0.4 0.12**	5.3	BEPC19-1111CPHFR BEPC19-1110GAFR
9.0±0.3 .354±.012	1.28	46.4	59.2	2750	1560±25% 1080±25%	125±5% 200±7%	1.11 0.32**	13	BEPC25-1111CPHFR
8.75±0.15 .344±.006	1.39	33.3	46.2	1540	1560±25% 1080±25%	80±5% 125±7%	0.65 0.22**	11	BEPC25B-1111GAFR
12.0±0.3 .472±.012	1.34	54.6	73.1	4000	1540±25% 1030±25%	125±5% 200±7%	1.56 0.46**	18	BEPC27-1111CPHFR
8.5±0.1 .335±.004	1.70	33.0	55.9	1840	1400±25%	80±5% 125±7%	0.73	10	BEPC27N-1114CPHFR
13.0±0.3 .512±.012	1.34	61.0	81.6	4980	1570±25% 1060±25%	125±5% 200±7%	2.03 0.58**	23	BEPC30-1112CPHFR

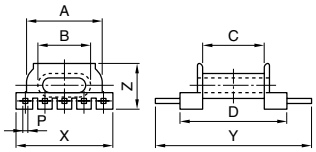
* *AL-value: 1kHz, 0.5mA, 100Ts*
** *Core loss: 500kHz, 50mT, 100°C*



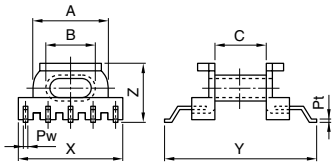
Lead through type



Drop in type



SMD type

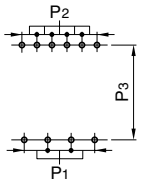


Bobbin (Lead through type) Part No.	Dimensions in mm inches							
	A	**B**	**C**	**D**	**E**	**X**	**Y**	**Z**
BEPC13-1110CPHFR	10.22 .402	6.93 .273	6.88 .271	0.9 .035	2.5 .098	13.2 .520	13.2 .520	7.5 .295
BEPC17-1110CPHFR	14.07 .554	9.88 .389	9.55 .376	2.5 .098	4.5 .177	17.2 .677	17.5 .689	11.9 .469
BEPC19-1111CPHFR	15.57 .613	10.78 .424	11.95 .470	2.5 .098	4.5 .177	18.7 .736	19.0 .748	11.9 .469
BEPC25-1111CPHFR	20.37 .802	13.73 .541	14.7 .579	3.0 .118	4.5 .177	25.0 .984	25.0 .984	16.0 .630
BEPC27-1111CPHFR	21.32 .839	15.33 .604	20.7 .815	3.0 .118	4.5 .177	27.0 1.063	32.0 1.260	16.0 .630
BEPC27N-1114CPHFR	20.5 .807	15.9 .623	16.5 .650	0.3 .012	3.5 .138	28.5 1.122	29.8 1.173	8.7 .343
BEPC30-1112CPHFR	23.32 .918	17.33 .682	22.7 .894	3.0 .118	4.5 .177	30.0 1.181	35.0 1.378	16.0 .630

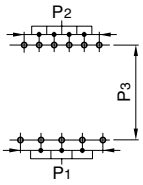
Bobbin (SMD type) Part No.	Dimensions in mm inches							
	A	**B**	**C**	**D**	**E**	**X**	**Y**	**Z**
BEPC10-118GAFR	7.5 .295	5.95 .234	3.9 .154	—	—	10.8 .425	11.5 .453	4.85 .193
BEPC13-1110GAFR	10.3 .406	6.93 .273	6.9 .272	—	—	14.0 .551	20.4 .803	7.02 .276
BEPC17-119GAFR	14.1 .555	9.9 .390	9.6 .378	—	—	17.5 .689	23.0 .906	9.8 .386
BEPC19-1110GAFR	15.4 .606	10.7 .421	12.0 .472	—	—	20.0 .787	25.0 .984	9.75 .384
BEPC25B-1111GAFR	20.1 .791	15.7 .618	14.7 .579	—	—	25.0 .984	28.7 1.130	9.8 .386

Bobbin (Drop in type) Part No.	Dimensions in mm inches							
	A	**B**	**C**	**D**	**E**	**X**	**Y**	**Z**
BEPC19-1110SAFR	15.6 .611	10.7 .413	12.0 .480	18.6 .835	—	20.0 .768	26.0 1.228	9.55 .337
BEPC25B-1111SFR	20.2 .795	16.0 .630	14.7 .579	21.7 .854	—	25.0 .984	37.7 1.484	9.40 .370

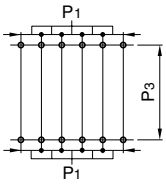
* Please see the next page additionally.



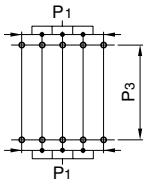
Type 1



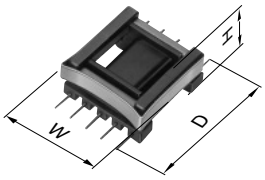
Type 2

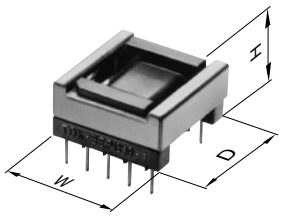


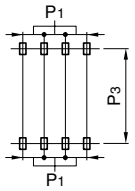
Type 3



Type 4







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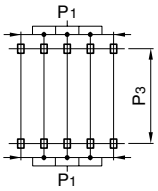
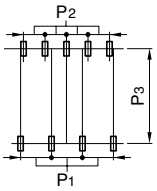
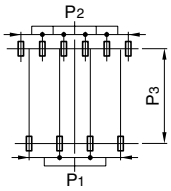


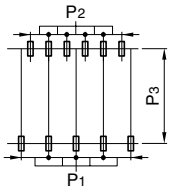
Type 7



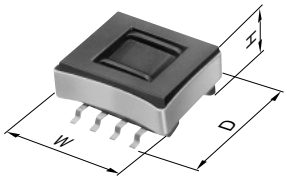
Type 8



Type 9



Type 10



t*	øP (mm)	P1 (mm)	P2 (mm)	P3 (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓw (mm)	Wt (g)	Connecting pin pattern
0.5	□0.49	2.5	—	10.5	10	13.9 14.8 7.7	11.2	23.0	0.57	Type 4
0.9	□0.49	3.75	2.5	15.0	10	18.2 19.1 12.1	20.1	32.1	1.5	Type 1
0.9	□0.49	3.75	2.5	16.25	11	20.0 21.5 12.1	29.3	34.4	1.6	Type 2
0.9	0.8	5.0	3.75	20.0	11	26.1 27.0 16.2	54.4	45.0	3.9	Type 2
0.9	0.8	5.0	3.75	27.5	11	28.1 34.0 16.2	62.1	47.2	4.7	Type 2
0.8	0.8	3.75	—	25.0	14	29.0 36.5 9.0	32.4	43.7	3.1	Type 3
0.9	1.0	5.0	—	30.0	12	31.1 37.0 16.2	68.1	51.1	6.0	Type 3

t*	Pt×Pw (mm)	P1 (mm)	P2 (mm)	P3 (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓw (mm)	Wt (g)	Connecting pin pattern
0.35	0.3×0.5	2.0	—	10.8	8	11.0 11.7 5.2	3.2	17.5	0.14	Type 6
0.5	0.4×0.7	3.0	—	18.5	10	14.2 20.6 7.3	11.6	23.1	0.6	Type 7
0.8	0.4×0.7	5.0	3.5	21.8	9	18.2 23.2 9.9	20.1	32.1	1.1	Type 8
0.8	0.4×0.7	5.0	3.5	23.8	10	20.2 25.2 9.9	28.2	34.4	1.3	Type 9
0.8	0.4×0.8	5.0	3.5	27.5	11	26.1 28.9 9.9	32.3	44.3	1.9	Type 10

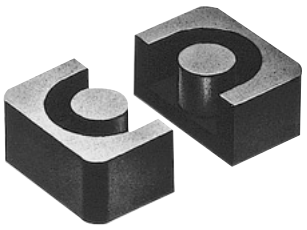
t*	Pt×Pw (mm)	P1 (mm)	P2 (mm)	P3 (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓw (mm)	Wt (g)	Connecting pin pattern
0.8	0.4×0.7	5.0	3.5	24.0	10	20.2 26.2 9.8	28.2	34.4	1.3	Type 9
0.8	□0.49	5.0	3.5	34.7	11	26.0 37.9 9.5	30.9	50.5	2.1	Type 10

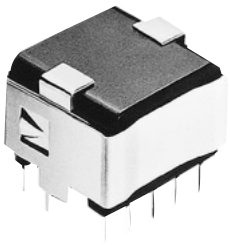
UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated), Phosphor bronze (Solder plated) for BEPC25B-1111GAFR only.
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
** Minimum thickness of bobbin inside which core is placed, including flanges.*

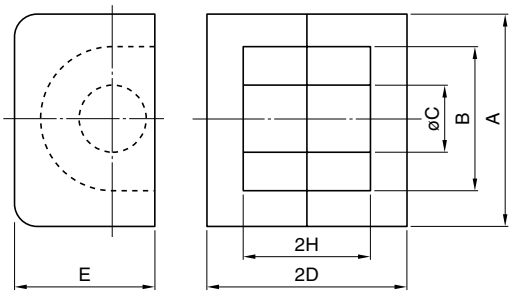
* Please see the former page additionally.

EP Cores and Bobbins

Cores



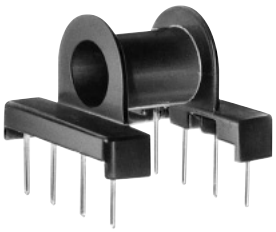


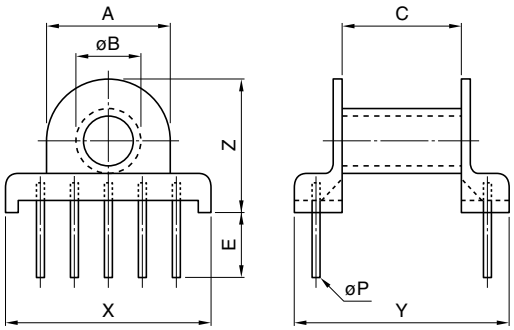


Part No.	Dimensions in mm inches					
	A	**B**	**øC**	**2D**	**E**	**2H**
PC40EP7-Z	9.2±0.2 .362±.008	7.4±0.2 .291±.008	3.3±0.1 .130±.004	7.4±0.1 .291±.004	6.35±0.15 .250±.006	5.2±0.2 .205±.008
PC40EP10-Z **PC50EP10-Z**	11.5±0.3 .453±.012	9.4±0.2 .370±.008	3.3±0.15 .130±.006	10.2±0.2 .402±.008	7.65±0.2 .301±.008	7.4±0.2 .291±.008
PC40EP13-Z **PC50EP13-Z**	12.5±0.3 .492±.012	10.0±0.3 .394±.012	4.35±0.15 .171±.006	12.85±0.15 .506±.006	8.8±0.2 .346±.008	9.2±0.2 .362±.008
PC40EP17-Z	18.0±0.4 .709±.016	12.0±0.4 .472±.016	5.68±0.18 .224±.007	16.8±0.2 .661±.008	11.0±0.25 .433±.010	11.3±0.3 .445±.012
PC40EP20-Z	24.0±0.5 .945±.020	16.5±0.4 .650±.016	8.75±0.25 .344±.010	21.4±0.2 .843±.008	14.95±0.35 .589±.014	14.3±0.3 .563±.012

* Please see the next page additionally.

Bobbins



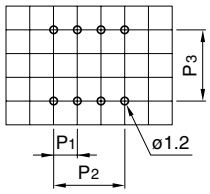


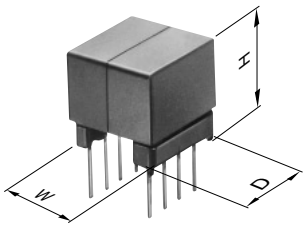
Part No.	Dimensions in mm inches						
	A	**øB**	**C**	**E**	**X**	**Y**	**Z**
BEP7-316DFR	7.0 .276	4.5 .177	3.1 .122	3.0 .118	9.2 .362	7.4 .291	8.25 .325
BEP10-318DFR	8.8 .346	4.8 .189	5.6 .220	5.2 .205	11.0 .433	11.0 .433	10.2 .402
BEP13-3110DFR	9.6 .378	5.7 .224	7.7 .303	5.3 .209	13.2 .520	13.5 .531	10.75 .423
BEP17-318DFR	11.4 .449	7.2 .283	9.4 .370	5.0 .197	19.0 .748	19.0 .748	13.2 .520
BEP20-8110DFR	15.9 .626	10.2 .402	12.4 .488	5.0 .197	24.7 .972	21.5 .846	16.6 .654

* Please see the former page additionally.

Effective parameter				Electrical characteristics			Wt (g)	Bobbin item
C_1 (mm^{-1})	**Ae (mm^2)**	**ℓ e (mm)**	**Ve (mm^3)**	**A_L-value (nH/N^2)***		**Core loss (W) max.**		
				Without air gap	**With air gap**	**100kHz, 200mT, 100°C**		
1.52	10.3	15.7	162	830 min.	63±5% 100±7%	0.065	1.4	BEP7-316DFR
1.70	11.3	19.2	217	800 min. 800±25%	63±5% 100±7%	0.08 0.02**	2.8	BEP10-318DFR
1.24	19.5	24.2	472	1170 min. 1100±25%	100±5% 160±7%	0.17 0.044**	5.1	BEP13-3110DFR
0.84	33.9	28.5	966	1840 min.	100±5% 250±7%	0.33	12	BEP17-318DFR
0.508	78	39.8	3120	3200 min.	100±5% 250±7%	1.1	28	BEP20-8110DFR

* *A_L-value: 1kHz, 0.5mA, 100Ts*
** *Core loss: 500kHz, 50mT, 100°C*





							Parameter		Wt (g)	Accessory item
t*	**øP (mm)**	**P_1 (mm)**	**P_2 (mm)**	**P_3 (mm)**	**Terminal pins**	**W D (mm) H**	**Aw (mm^2)**	**ℓ w (mm)**		
0.25	0.6	2.5	5.0	5.0	6	9.4 7.5 9.6	3.85	18.1	0.3	FEP-7-C
0.40	0.6	2.5	7.5	7.5	8	11.8 11.2 11.8	11.7	21.7	0.65	FEP-10-C
0.35	0.6	2.5	10.0	10.0	10	13.4 13.7 12.7	16.6	23.9	0.74	FEP-13-C
0.45	0.6	5.0	15.0	15.0	8	19.25 19.25 15.7	19.0	29.1	1.3	FEP-17-C
0.325	0.6	5.0	20.0	17.5	10	25.0 21.8 19.6	33.2	40.8	1.8	FEP-20-C

UL Grade: 94V-0, Material: FR phenol, Pin material: Phosphor bronze (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

RM Cores

Cores
RM4 to RM14

Bobbins
BRM4 to BRM14

Accessories
FRM4 to FRM14

Ordering Code System

Cores

PC40 RM6 A160 – 12

- PC40 — Material
- RM6 — Size of RM core
- A160 — AL-value(Z: without air gap)
- 12 — Number of Lead Slot / Type

Bobbins

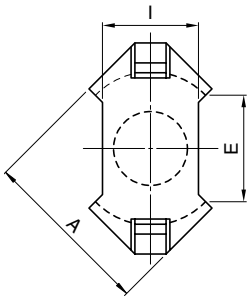
B RM6 – 714 CPFR

- B — Symbol of Bobbin
- RM6 — Size of RM core
- 714 — Code of Bobbin Material
- 7 — Number of Section
- 14 — Number of Terminal Pin
- CPFR — Type of Terminal Pin

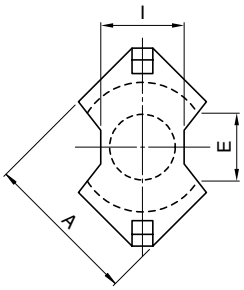
Accessories

F RM6 – AFR

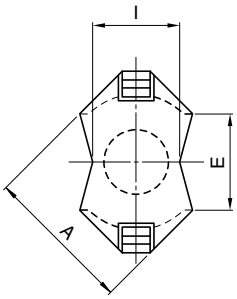
- F — Symbol of Accessory
- AFR — Type of Accessory
- RM6 — Size of RM core



Type 1



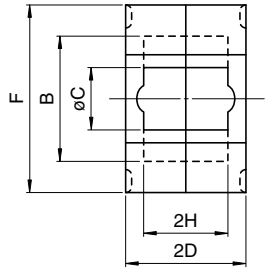
Type 2



Type 3

Part No.	Type	Dimensions in mm inches						
		A	**B**	**øC**	**2D**	**E min.**	**F**	**2H**
PC40RM4Z-12 **PC50RM4Z-12**	1	9.63±0.18 .379±.007	8.15±0.2 .321±.008	3.8±0.1 .150±.004	10.4±0.1 .409±.004	5.8 .228	10.8±0.2 .425±.008	7.2±0.2 .283±.008
PC40RM5Z-12 **PC50RM5Z-12**	1	12.05±0.25 .474±.010	10.4±0.2 .409±.008	4.8±0.1 .189±.004	10.4±0.1 .409±.004	6.0 .236	14.3±0.3 .563±.012	6.5±0.2 .256±.008
PC40RM6Z-12 **PC50RM6Z-12**	3	14.4±0.3 .567±.012	12.65±0.25 .498±.010	6.3±0.1 .248±.004	12.4±0.1 .488±.004	8.4 .331	17.6±0.3 .693±.012	8.2±0.2 .323±.008
PC40RM8Z-12	2	19.35±0.35 .762±.014	17.3±0.3 .681±.012	8.4±0.15 .331±.006	16.4±0.1 .646±.004	9.8 .386	22.75±0.45 .896±.018	11.0±0.2 .433±.008
PC40RM10Z-12	2	24.15±0.55 .951±.022	21.65±0.45 .852±.018	10.7±0.2 .421±.008	18.6±0.1 .732±.004	11.3 .445	27.85±0.65 1.096±.026	12.7±0.3 .500±.012
PC40RM12Z-12	2	29.25±0.55 1.152±.022	25.5±0.5 1.004±.020	12.6±0.2 .496±.008	23.5±0.1 .925±.004	12.9 .508	36.75±0.65 1.447±.026	17.1±0.3 .673±.012
PC40RM14Z-12	1	34.2±0.5 1.346±.020	29.5±0.5 1.161±.020	14.75±0.25 .581±.010	28.8±0.2 1.134±.008	17.0 .669	41.6±0.6 1.638±.024	21.1±0.3 .831±.012

* Please see the next page additionally.

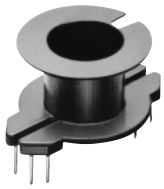


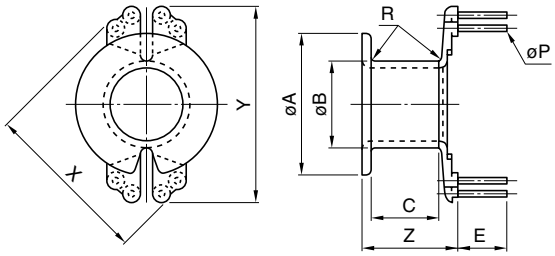
	Effective parameter				Electrical characteristics			Wt	Bobbin item
l	**C_1 (mm^{-1})**	**Ae (mm^2)**	**ℓ e (mm)**	**Ve (mm^3)**	**A_L-value (nH/N^2)***		**Core loss (W) max.**	**(g)**	
					Without air gap	**With air gap**	**100kHz, 200mT, 100°C**		
4.45±0.15 .175±.006	1.62	14.0	22.7	318	680 min. 960±25%	63±3% 100±3% 160±3%	0.12 0.036**	1.7	BRM4-714SDFR BRM4-716SDFR
6.6±0.2 .260±.008	0.940	23.7	22.4	530	1250 min. 1340±25%	63±3% 100±3% 160±3%	0.18 0.053**	3.0	BRM5-714CPFR BRM5-716CPFR
8.0±0.2 .315±.008	0.781	36.6	28.6	1050	1830 min. 1700±25%	100±3% 160±3% 250±3%	0.41 0.11**	5.5	BRM6-714CPFR BRM6-716CPFR
10.8±0.2 .425±.008	0.594	64.0	38.0	2430	1950 min.	100±3% 160±3% 250±3%	0.97	13	BRM8-718CPFR BRM8-7112CPFR
13.25±0.25 .522±.010	0.450	98.0	44.0	4310	3630 min.	160±3% 250±3% 400±3%	1.8	23	BRM10-7110SDNFR BRM10-7112SDFR
16.0±0.3 .630±.012	0.406	140	56.9	7970	4150 min.	160±3% 250±3% 400±3%	3.3	42	BRM12-7111CPFR BRM12-7112CPFR
18.7±0.3 .736±.012	0.393	178	70.0	12500	4600 min.	160±3% 250±3% 400±3%	4.75	70	BRM14-7110CPFR BRM14-7112CPFR

* *A_L-value: 1kHz, 0.5mA, 100Ts*
** *Core loss: 500kHz, 50mT, 100°C*

* Please see the former page additionally.

Bobbins

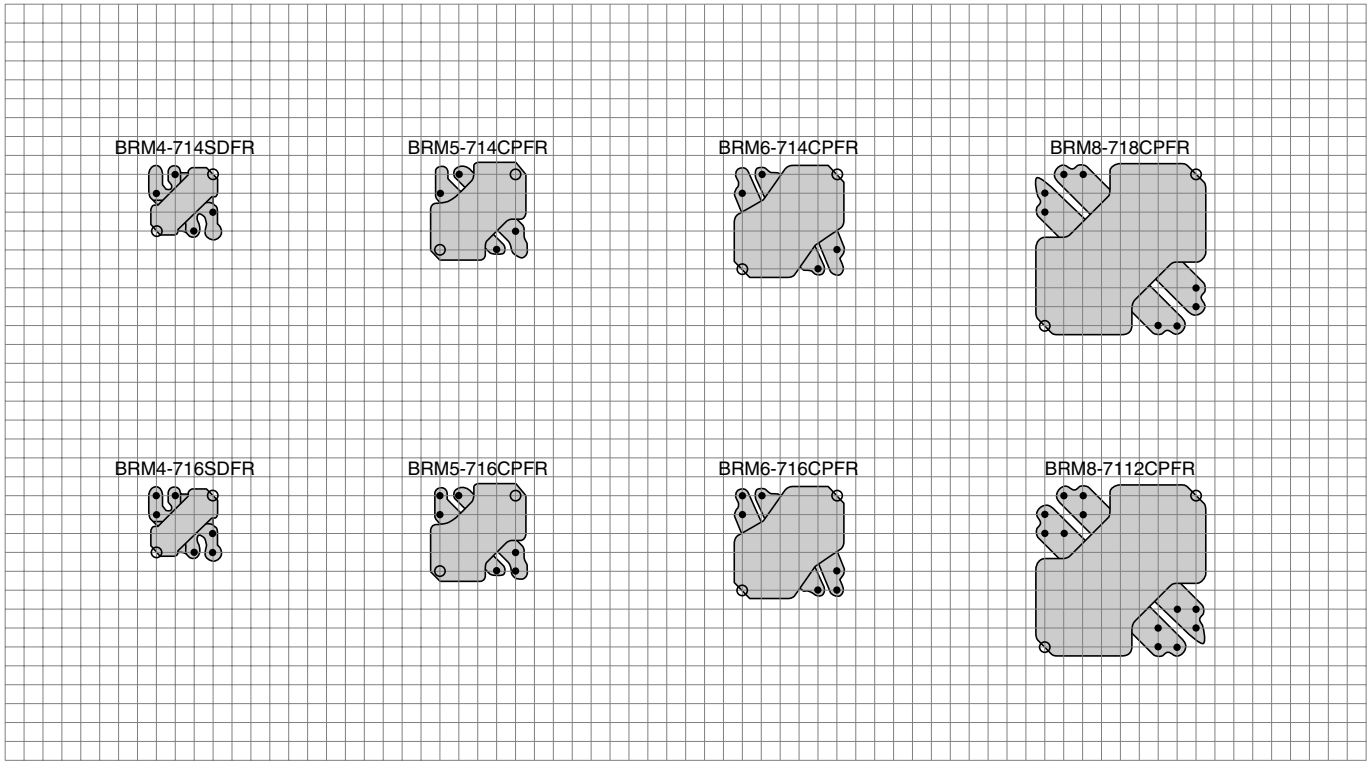


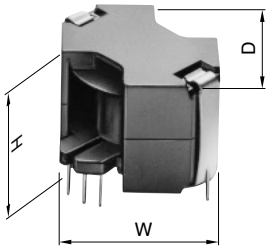


Part No.	Dimensions in mm / inches						
	øA	**øB**	**C**	**E**	**X**	**Y**	**Z**
BRM4-716SDFR	7.7 .303	4.9 .193	5.9 .232	5.25 .207	10.0 .394	4.3 .169	8.0 .315
BRM5-716CPFR	10.1 .398	5.95 .234	4.9 .193	5.0 .197	12.5 .492	16.2 .638	7.9 .311
BRM6-716CPFR	12.3 .484	7.45 .293	6.4 .252	4.5 .177	15.0 .591	20.0 .787	9.6 .378
BRM8-718CPFR	16.9 .665	9.95 .392	9.15 .360	5.6 .220	20.0 .787	24.6 .967	12.7 .500
BRM10-7112SDFR	21.0 .827	12.5 .492	10.75 .423	4.78 .118	22.5 .886	28.0 1.102	13.5 .531
BRM12-7112CPFR	24.7 .972	14.5 .571	14.8 .583	6.35 .250	30.0 1.181	38.0 1.496	18.9 .744
BRM14-7112CPFR	28.8 1.134	16.8 .661	18.8 .740	6.35 .250	35.6 1.402	41.9 1.650	22.9 .902

* Please see the next page additionally.

Connecting Pin Patterns (2.54mm/0.1 inch grids) View in mounting direction

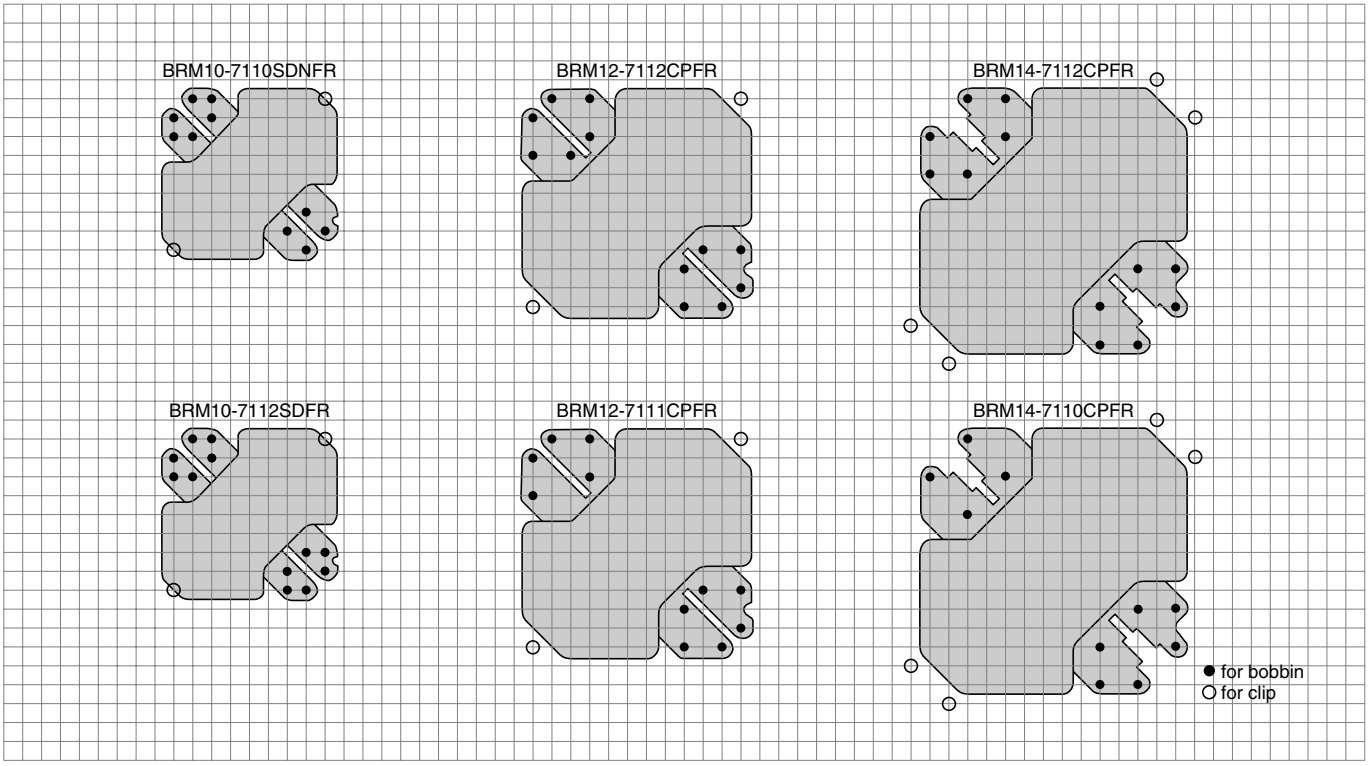




t*	øP (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm²)	Parameter ℓ w (mm)	Wt (g)	Other bobbins' item	Accessory item
0.25	□0.45	4	10.0 10.0 10.5	8.05	19.8	0.23	BRM4-714SDFR	FRM4-AFR
0.35	0.5	6	12.5 12.5 10.5	10.1	25	0.26	BRM5-714CPFR	FRM5-AFR
0.3	0.6	6	15.0 15.0 12.5	15.5	31	0.43	BRM6-714CPFR	FRM6-AFR
0.425	0.6	8	20.0 20.0 16.5	31.0	42	1.00	BRM8-7112CPFR	FRM8-AFR
0.5	□0.51	12	24.7 24.7 18.7	45.7	53	1.6	BRM10-7110SDNFR	FRM10-AFR
0.55	0.8	12	30.0 30.0 23.6	75.5	55	2.7	BRM12-7111CPFR	FRM12-AFR
0.6	0.83	12	35.6 35.6 29.0	113	72	3.8	BRM14-7110CPFR	FRM14-AFR

UL Grade: 94V-0, Material: FR phenol, Pin material: Steel wire (Solder plated)
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
** Minimum thickness of bobbin inside which core is placed, including flanges.*

* Please see the former page additionally.



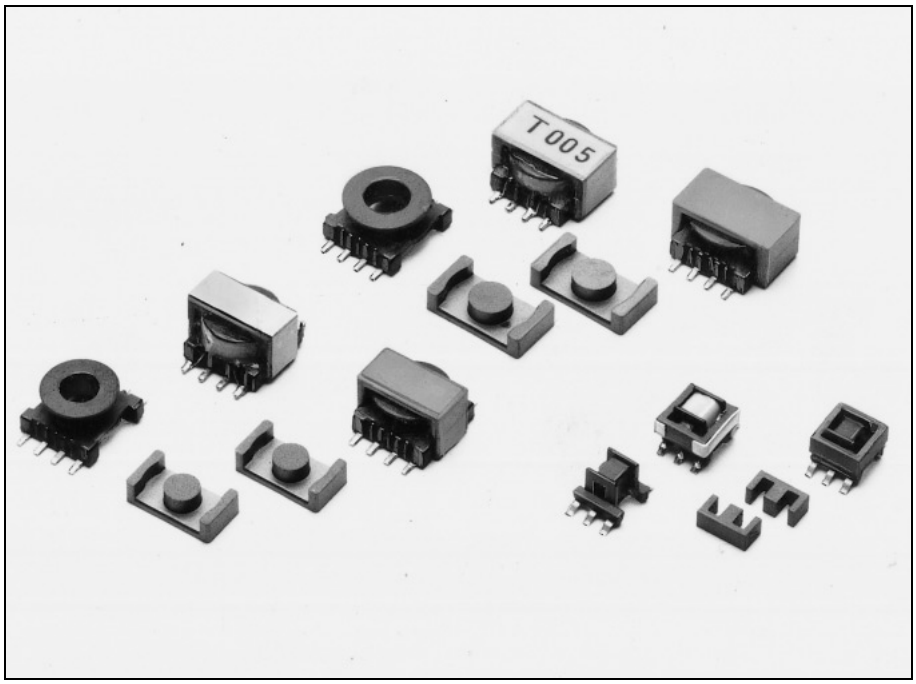
SMD Cores

Cores

EE5, EE8.9/8
ER9.5/5, ER11/3.9, ER11/5
ER14.5/6
EEM12.7/13.7

Bobbins

BE-5, BE8.9/8
BER9.5/5, BER11/3.9, BER11/5
BER14.5/6
BEM12.7



Ordering Code System

Cores

PC44 EE 5 – Z

Material — PC44
Size of E core — EE 5
AL-value(Z: without air gap) — Z

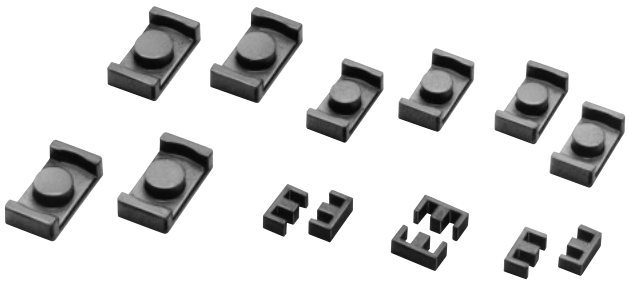
Bobbins

B E – 5 – 916 F

Symbol of Bobbin — B
Size of E core — E – 5
Code of Bobbin Material — 916
Number of Section — 1
Number of Terminal Pin — 6
Type of Terminal Pin — F

SMD Cores and Bobbins

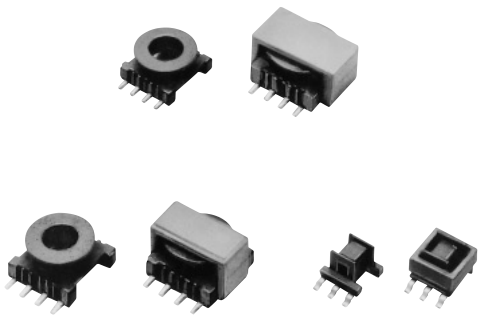
Cores

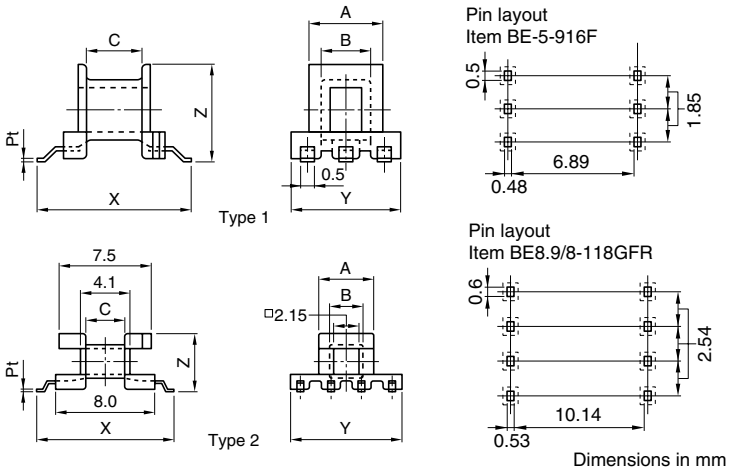


Part No.	Type	Dimensions in mm inches						
		A	**2B**	**C_1**	**C_2**	**E**	**F**	**2H**
PC44EE5-Z	1	5.25±0.05 .207±.002	5.3±0.1 .209±.004	1.35±0.05 .053±.002		0.70±0.05 .028±.002	1.95±0.05 .077±.002	4.0 .157
PC44EE8.9/8-Z	1	8.86±0.20 .349±.008	8.0±0.3 .315±.012	1.90±0.12 .075±.005		1.91±0.20 .075±.008	1.90±0.12 .075±.008	4.5±0.3 .177±.012
PC44ER9.5/5-Z **PC50ER9.5/5-Z**	2	9.35±0.15 .368±.006	4.9±0.1 .193±.004	3.4±0.1 .134±.004			4.9±0.1 .193±.004	3.35±0.15 .132±.004
PC44ER11/3.9-Z **PC50ER11/3.9-Z**	2	10.83±0.18 .426±.007	3.85±0.10 .152±.004	4.13±0.13 .163±.005			5.9±0.1 .232±.004	2.10±0.15 .083±.006
PC44ER11/5-Z **PC50ER11/5-Z**	2	10.83±0.18 .426±.007	4.9±0.1 .193±.004	4.13±0.13 .163±.005			5.9±0.1 .232±.004	3.15±0.15 .124±.006
PC44ER14.5/6-Z **PC50ER14.5/6-Z**	2	14.5±0.2 .571±.008	5.9±0.1 .232±.004	4.7±0.1 .185±.004			6.7±0.1 .264±.004	3.3±0.2 .130±.008
PC44EEM12.7/13.7-Z **PC50EEM12.7/13.7-Z**	3	12.75±0.25 .502±.010	13.7±0.3 .539±.012	6.0±0.1 .236±.004	1.85±0.10 .073±.004	1.7±0.1 .067±.004	3.30±0.15 .130±.006	9.1±0.3 .358±.012

* Please see the next page additionally.

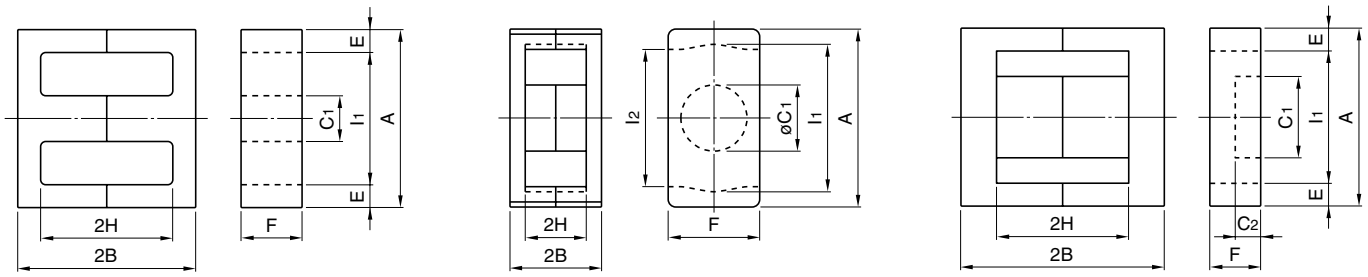
Bobbins





Part No.	Type	Dimensions in mm inches					
		A	**B**	**C**	**X**	**Y**	**Z**
BE5-916F **BE5-926F**	1	3.5 .138	2.3 .091	2.7 .106	7.85 .309	5.2 .205	4.65 .183
BE8.9/8-118GFR	2	4.5 .177	[6]2.7 .016	3.1 .122	11.2 .441	9.2 .362	4.75 .187
BEM12.7-118GAFR	3	8.9 .350	6.9 .272	7.5 .295	16.7 .657	12.8 .504	4.9 .193
BER9.5/5-118GAFR	4	7.3 .287	4.45 .175	2.15 .085	11.5 .452	8.6 .339	4.45 .175
BER11/3.9-1110GAFR	4	8.5 .335	5.2 .205	1.05 .041	12.45 .490	10.5 .413	3.4 .134
BER11/5-1110GAFR**	4	8.5 .335	5.2 .205	1.95 .077	12.2 .480	10.5 .413	4.70 .185
BER14.5/6-1110GAFR	4	11.4 .449	5.9 .232	2.0 .079	16.0 .630	14.0 .551	5.75 .226

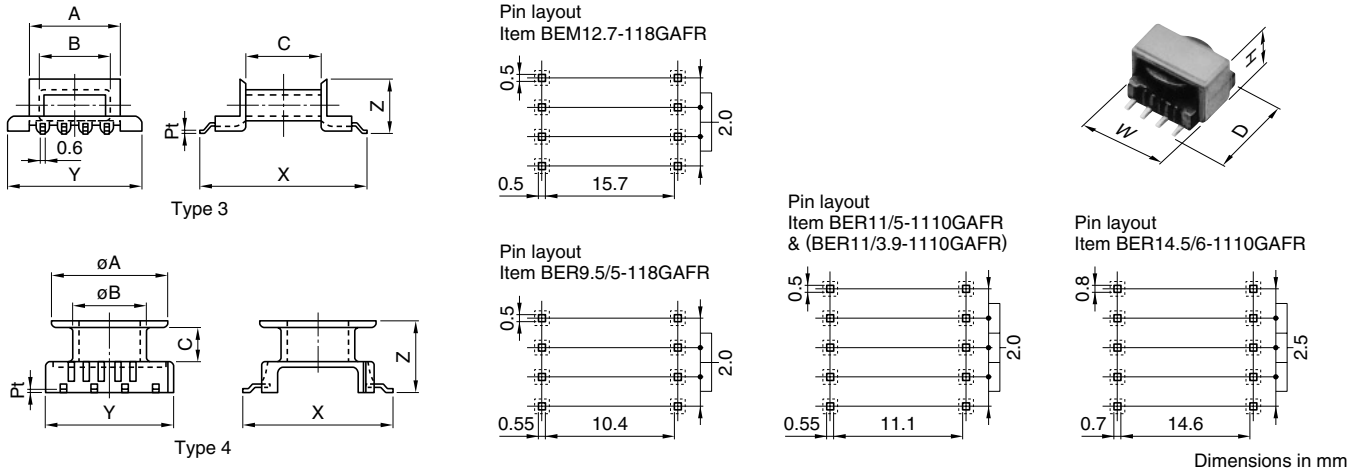
** *8-pin is available (Part No. BER11/5-118GAFR).*



		Effective parameter				Electrical characteristics		Wt	Bobbin item
l_1	l_2	C_1 (mm^{-1})	Ae (mm^2)	ℓe (mm)	Ve (mm^3)	A_L-value (nH/N^2)* Without air gap	With air gap	(g)	
3.85 .152		4.72	2.67	12.6	33.6	200 min.		0.2	BE-5-916F
5.08 min. .200 min.		3.15	4.96	15.6	77.4	480±25%		0.6	BE8.9/8-118GFR
7.63±0.13 .300±.005	7.0 min. .276 min.	1.68	8.47	14.2	120	610 min. 750±25%	63±5% 100±7%	0.6	BER9.5/5-118GAFR
8.85±0.15 .348±.006	7.9 min. .311 min.	1.08	11.7	12.6	147	1040 min. 1100±25%	63±5% 100±7%	0.8	BER11/3.9-1110GAFR
8.85±0.15 .348±.006	7.9 min. .311 min.	1.24	11.9	14.7	175	870 min. 960±25%	63±5% 100±7%	1.0	BER11/5-1110GAFR
11.8±0.2 .465±.008	11.8±0.2 .465±.008	1.08	17.6	19.0	334	1280 min. 1150±25%	100±5% 160±7%	1.8	BER14.5/6-1110GAFR
9.0 min. .354 min.		2.28	12.0	27.3	328	820±25% 580±25%	40±5% 63±7%	1.9	BEM12.7-118GAFR

* *A_L-value: 1kHz, 0.5mA, 100Ts*

* Please see the former page additionally.



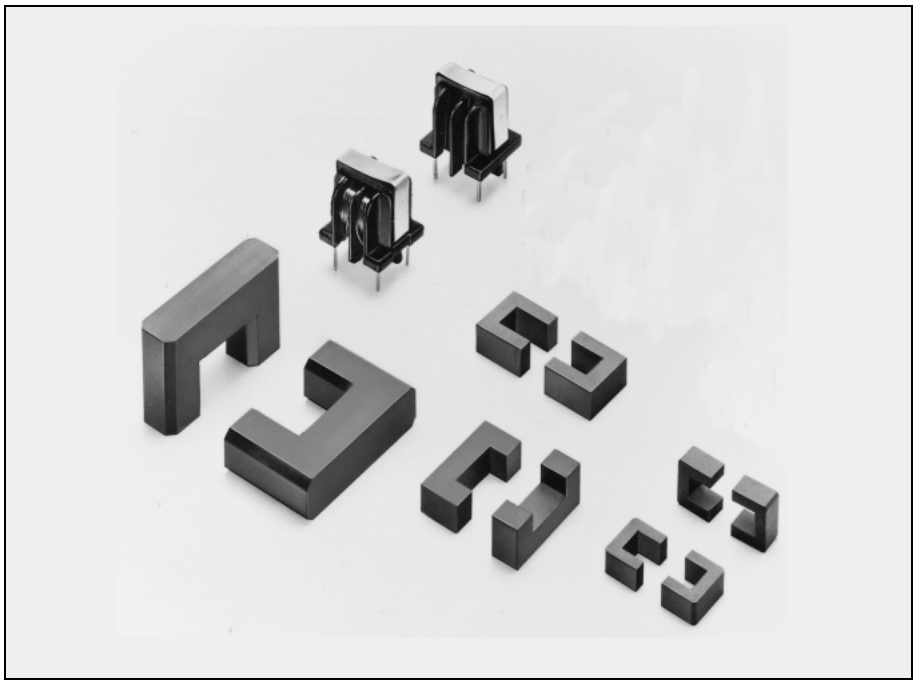
t*	Pt×Pw (mm)	Terminal pins	W D (mm) H	Parameter Aw (mm^2)	ℓw (mm)	Material	Wt (g)	Accessory item
0.4	0.2×0.5	6	5.7 7.8 4.8	1.62	12.4	Diallyl Phtalate	0.03 0.08	FE-5-A
0.2	0.2×0.6	6	9.3 11.3 4.8	2.79	14.4	FR Phenol	0.17	—
0.35	0.3×0.5	8	13.6 16.8 5.0	7.5	22.4	FR Phenol	0.31	FEM12.7/13.7-A
0.4	0.3×0.5	8	9.9 11.7 5.9	3.06	18.5	FR Phenol	0.16	FER9.5/5-A
0.4	0.25×0.7	10	11.0 12.6 4.7	1.73	21.5	FR Phenol	0.21	FER11/3.9-A
0.4	0.3×0.5	10	11.5 12.3 6.4	3.22	21.5	FR Phenol	0.21	FER11/5-A
0.4	0.3×0.8	10	15.1 16.2 7.3	5.5	27.2	FR Phenol	0.55	FER14.5/6-A

UL Grade: 94V-0, Material: F, G types are Phosphor bronze wire (Solder plated), GA type is Steel wire (Solder plated).
Maximum number of turns N that can be wound on bobbins, see section of "Maximum number of Turns on Bobbins".
* *Minimum thickness of bobbin inside which core is placed, including flanges.*

ET, UU and FT Cores

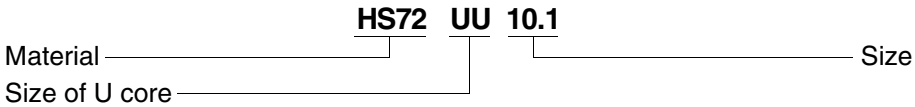
Cores

ET20 to 35
UU10.1 to UU19.7B
FT20.6



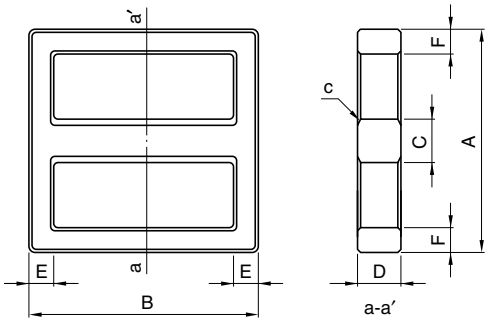
Ordering Code System

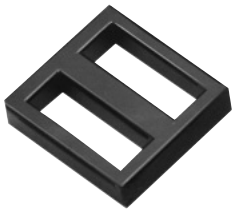
Cores



ET and UU Cores

ET Cores

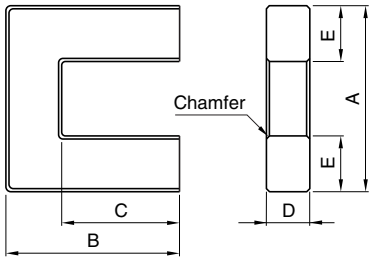


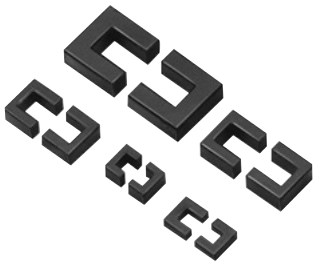


Part No.	A_L-value* (nH/N²)	Dimensions in mm / inches A	B	C	D	E	F	Ae (mm²)	ℓe (mm)
HS72ET20	$3100^{+40\%}_{-25\%}$	20.1±0.4 .791±.016	20.1±0.4 .791±.016	4.0±0.2 .157±.008	4.4±0.2 .173±.008	2.00±0.15 .079±.006	2.00±0.15 .079±.006	17.6	50.6
HS72ET24	$2600^{+40\%}_{-25\%}$	24.2±0.5 .953±.020	24.2±0.5 .953±.020	4.0±0.2 .157±.008	4.0±0.3 .157±.012	2.40±0.15 .094±.006	2.40±0.15 .094±.006	17.8	61.0
HS72ET28	$3550^{+40\%}_{-25\%}$	28.45±0.55 1.120±.022	28.45±0.55 1.120±.022	5.0±0.2 .197±.008	5.0±0.3 .197±.012	2.90±0.15 .114±.006	2.90±0.15 .114±.006	27.4	71.4
HS10ET28	4835±30%	28.45±0.55 1.120±.022	28.45±0.55 1.120±.022	5.0±0.2 .197±.008	5.0±0.3 .197±.012	2.90±0.15 .114±.006	2.90±0.15 .114±.006	27.4	71.4
HS72ET35	$6000^{+40\%}_{-25\%}$	35.3±0.6 1.390±.024	35.3±0.6 1.390±.024	7.5±0.3 .295±.012	7.5±0.3 .295±.012	4.0±0.2 .157±.008	4.0±0.2 .157±.008	58.6	86.7

* *A_L-value: 1kHz, 0.25A/m, 10Ts*

UU Cores



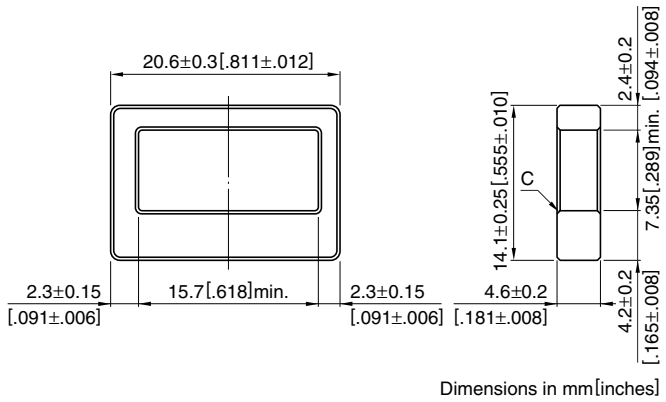


Part No.	A_L-value* (nH/N²)	Dimensions in mm / inches A	B	C	D	E	Ae (mm²)	ℓe (mm)
HS72UU10.1	1005±25%	10.1±0.3 .398±.012	7.5±0.25 .295±.010	4.5±0.25 .177±.010	2.9±0.15 .114±.006	2.95±0.15 .116±.006	8.6	35.7
HS72UU10.5	1500±25%	10.5±0.3 .413±.012	7.80±0.2 .307±.008	5.25±0.3 .207±.012	5.00±0.20 .197±.008	2.5±0.20 .098±.008	12.5	40.3
HS72UU15.7	2600±25%	15.7±0.4 .618±.016	9.70±0.25 .382±.010	6.00±0.30 .236±.012	6.00±0.30 .236±.012	4.50 .177	24.8	50.0
HS72UU19.7B	2650±25%	19.7±0.4 .776±.016	17.7±0.3 .697±.012	11.7±0.3 .461±.012	6.00±0.30 .236±.012	6.00±0.30 .236±.012	35.7	81.1

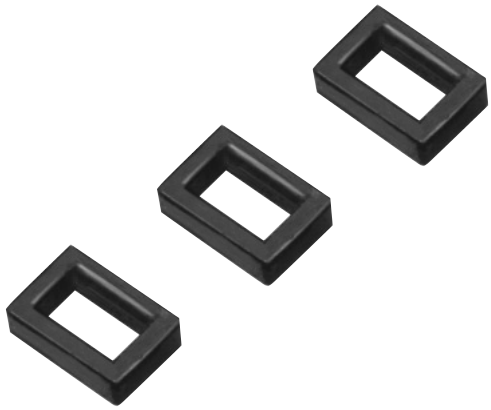
* *A_L-value: 1kHz, 0.25A/m, 10Ts*

* Please see the next page additionally.

FT Cores



Dimensions in mm[inches]



Part No.	AL-value* (nH/N²)	Ae (mm²)	ℓe (mm)
HS72FT20.6	$2200^{+40\%}_{-30\%}$	12.1	52.9
HS10FT20.6	2690±30%	12.1	52.9

* *AL-value: 1kHz, 0.25A/m, 10Ts*

* Please see the former page additionally.

T Cores

TDK's toroidal cores are available in a number of sizes.
Therefore, by selecting the ferrite material which corresponds to the application, it is possible to design stable transformers, inductors, etc. to cover a wide band range.

FEATURES

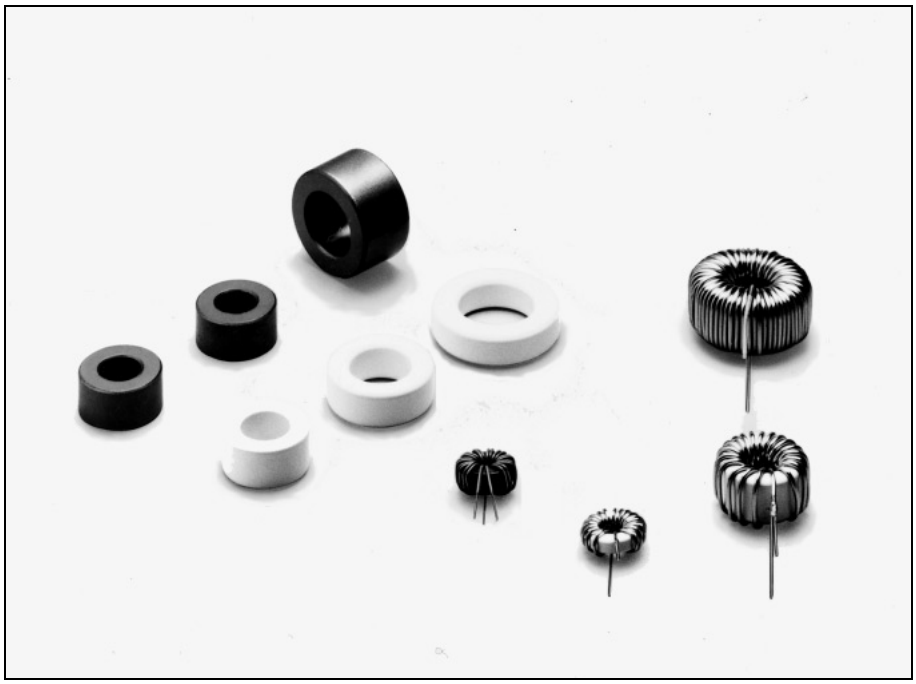
- Selection of core material to correspond to the application is possible as a result of standard ferrite materials with μi=3300 to 15000.
- Epoxy and paraxylylene insulation coating is available.

APPLICATIONS

Pulse transformers, choke coils, filters, current sensors, EMI/RFI filters, balun transformers.

Toroidal Cores

For Common mode choke
T14 to T44.5
Material: HS52, HS72, HS10
For General Use
T3.05 to T44.5
Material: H5A, H5B2, H5C2, H5C3, HP5



Ordering Code System

Cores

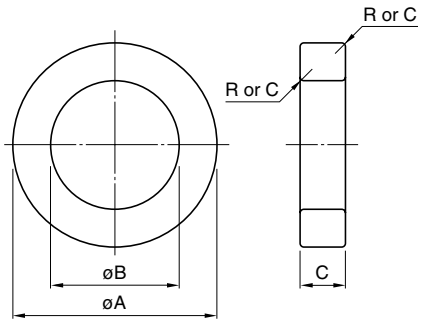
HS52 T 22 × 6.5 × 14

- HS52: Material
- T: Symbol of Toroidal core
- 22: Outside Diameter
- 6.5: Thickness
- 14: Inside Diameter

Toroidal Cores

For Common mode choke

Cores



Part No.	JIS C 2569	Dimensions in mm inches			Effective parameter	
		øA	**øB**	**C**	**C_1 (mm^{-1})**	**Ae (mm^2)**
T14×7×8		14.0±0.3 .551±.012	8.0±0.3 .315±.012	7.0±0.3 .276±.012	1.60	20.5
T18×10×10	FOR-18-10-10	18.0±0.3 .709±.012	10.0±0.3 .394±.012	10.0±0.3 .394±.012	1.07	38.9
T16×8×12		16.0±0.3 .630±.012	12.0±0.3 .472±.012	8.0±0.3 .315±.012	2.73	15.9
T20×10×12	FOR-20-10-12	20.0±0.4 .787±.016	12.0±0.4 .472±.016	10.0±0.3 .394±.012	1.23	39.1
T22×6.5×14		22.0±0.4 .866±.016	14.0±0.4 .551±.016	6.5±0.3 .256±.012	2.14	25.6
T25×13×15		25.0±0.4 .984±.016	15.0±0.4 .591±.016	13.0±0.3 .512±.012	0.946	63.6
T28×13×16	FOR-28-13-16	28.0±0.4 1.102±.016	16.0±0.4 .630±.016	13.0±0.3 .512±.012	0.864	76.0
T31×8×19		31.0±0.5 1.220±.020	19.0±0.5 .748±.020	8.0±0.3 .315±.012	1.60	47.1
T38×14×22		38.0±0.5 1.496±.020	22.0±0.5 .866±.020	14.0±0.4 .551±.016	0.821	109
T44.5×13×30	FOR-45-13-30	44.5±0.5 1.752±.020	30.0±0.5 1.181±.020	13.0±0.4 .512±.016	1.23	93

* Please see the next page additionally.

Can be coated with epoxy. If epoxy-coated products are desired, please suffix E to part No. when ordering.
Ex. HS52 T22 × 6.5 × 12E*

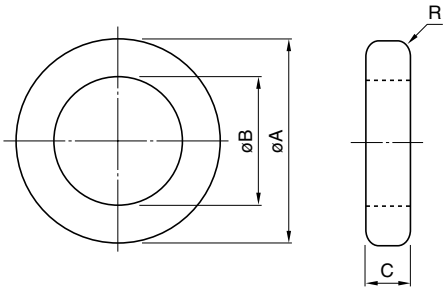
* Dielectric breakdown voltage 1000Vd.c. min.

* Please see the former page additionally.

			AL-value (nH/N²)			Wt
ℓe (mm)	Ve (mm³)	R or C	Material HS52*	HS72**	HS10***	(g)
32.8	671	C0.5	3800±25%	5100±25%	6800±30%	3.4
41.5	1610	C0.5	6400±25%	8800±25%	10150±30%	8.3
43.4	689	C1.0	2500±25%	3400±25%	4500±30%	3.4
48.1	1880	C0.5	5600±25%	7600±25%	10000±30%	9.5
54.7	1400	C0.5	3200±25%	4400±25%	5750±30%	6.9
60.2	3830	C1.0	7300±25%	9900±25%	13000±30%	19
65.6	4990	C0.5	8000±25%	10700±25%	14200±30%	26
75.5	3550	C1.0	4300±25%	5800±25%	7700±30%	17
89.7	9800	C1.0	8400±25%	10700±25%	—	50
114	10600	C0.5	5600±25%	7100±25%	—	53

* *AL-value: 100kHz, 100mV, 10Ts*
** *AL-value: 100kHz, 10mV, 5Ts*
*** *AL-value: 10kHz, 10mV, 10Ts*

Toroidal Cores
For General Use



Part No. (ø A×C×ø B)	Dimensions in mm / inches			Effective parameter		
	øA	**øB**	**C**	**C_1 (mm^{-1})**	**Ae (mm^2)**	**ℓe (mm)**
T3.05×1.27×1.27	3.05 .120	1.27 .050	1.27 .050	5.65	1.06	5.99
T4×1×2	4.00 .157	2.00 .079	1.00 .039	9.07	0.961	8.71
T3.94×1.27×2.23	3.94 .155	2.23 .088	1.27 .050	8.69	1.06	9.19
T4.83×1.27×2.29	4.83 .190	2.29 .090	1.27 .050	6.63	1.54	10.2
T6×1.5×3	6.00 .236	3.00 .118	1.50 .059	6.04	2.16	13.1
T5.84×1.52×3.05	5.84 .230	3.05 .120	1.52 .060	6.36	2.05	13.0
T8×2×4	8.00 .315	4.00 .157	2.00 .079	4.53	3.84	17.4
T10×2.5×5	10.0 .394	5.00 .197	2.50 .098	3.63	6.01	21.8
T12×3×6	12.0 .472	6.00 .236	3.00 .118	3.02	8.65	26.1
T14×3.5×7	14.0 .551	7.00 .276	3.50 .138	2.59	11.8	30.5
T20×5×10	20.0 .787	10.0 .394	5.00 .197	1.81	24.0	43.6
T20×7.5×14.5	20.0 .787	14.5 .571	7.50 .295	2.61	20.4	53.3
T28×13×16	28.0 1.102	16.0 .630	13.0 .512	0.864	76.0	65.6
T31×8×19	31.0 1.220	19.0 .748	8.00 .315	1.60	47.1	75.5
T38×14×22	38.0 1.496	22.0 .866	14.0 .551	0.821	109	89.7
T44.5×13×30	44.5 1.752	30.0 1.181	13.0 .512	1.23	93.0	114

* Please see the next page additionally.

* Please see the former page additionally.

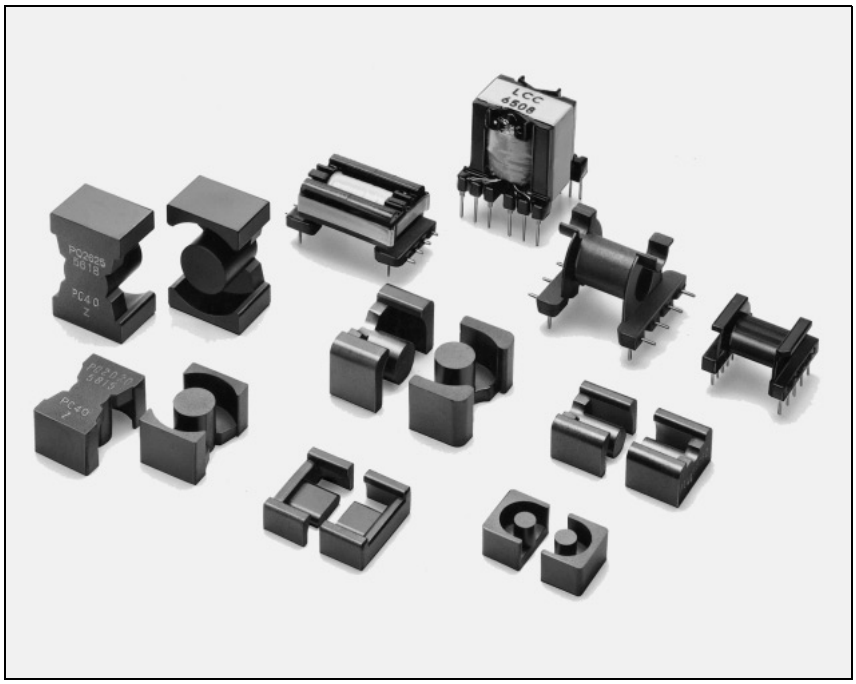
AL-value (nH/N²)					
HP5	**H5B2**	**H5C3**	**PC40**	**H5A**	**H5C2**
1100±20%	1700±25%	3340±30%			
670±20%	1000±25%	2000±30%			
720±20%	1080±25%	2170±30%			
950±20%	1400±25%	2840±30%			
1000±20%	1500±25%	3000±30%			
990±20%	1480±25%	2960±30%			
1330±20%	2000±25%	4000±30%			
1670±20%	2500±25%	5000±30%			
			1020±25%	1400±25%	3600±25%
			1200±25%	1650±25%	4200±25%
			1750±25%	2350±25%	6000±30%
			1050±25%	1800±25%	4100±30%
					14000±30%
					7700±30%
					13160±30%
					10000±30%

Test conditions
HP5, H5B2, H5C2 and H5C3: 10kHz, 10mV, 10Ts
PC40: 100kHz, 10mV, 10Ts
H5A: 50kHz, 10mV, 10Ts

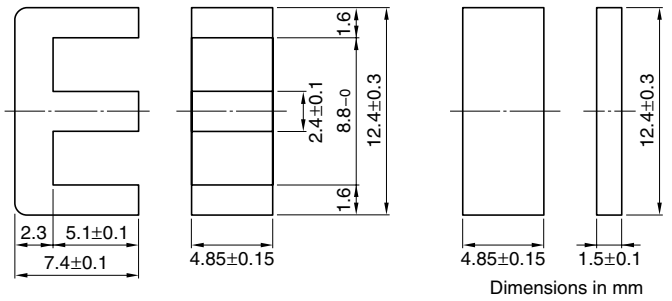
Part II

Technical Data

EI Cores (EI12.5 to EI60)
EE Cores (EE10/11 to EE62.3/62/6)
EER Cores (EER25.5 to EER42/42/20)
ETD Cores (ETD19 to ETD49)
PQ Cores (PQ20/16 to PQ50/50)
LP Cores (LP23/8 to LP32/13)
RM Cores (RM4 to RM14)
EPC Cores (EPC13 to EPC30)



EI12.5 Cores
(JIS FEI 12.5)



Dimensions in mm

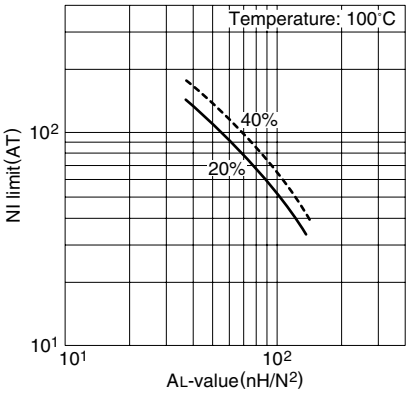
Parameter

Core factor	C_1	mm^{-1}	1.48
Effective magnetic path length	ℓe	mm	21.3
Effective cross-sectional area	Ae	mm^2	14.4
Effective core volume	Ve	mm^3	308
Cross-sectional center leg area	Acp	mm^2	11.6
Minimum cross-sectional area	Acp min.	mm^2	10.8
Cross-sectional winding area of core	Acw	mm^2	17.3
Weight (approx.)		g	1.9

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI12.5-Z	1200±25% (1kHz, 0.5mA)* 2120 min. (100kHz, 200mT)	0.12 max.	8.8W (100kHz)

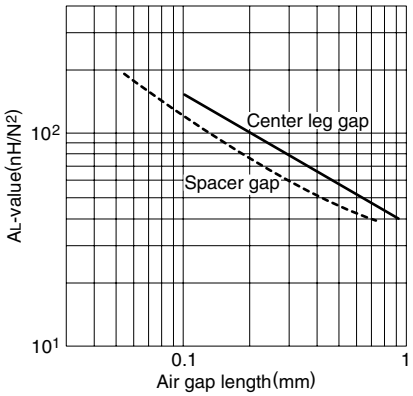
* *Coil: ø0.2 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI12.5 gapped core (Typical)



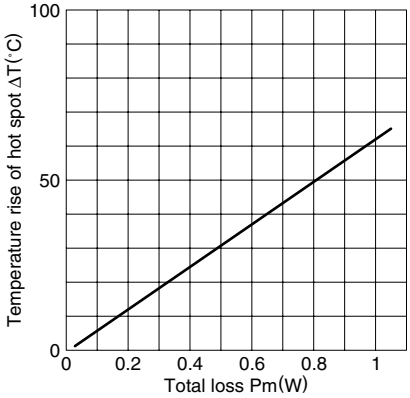
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI12.5 core (Typical)

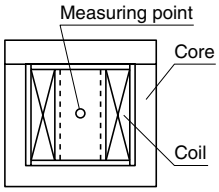


Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

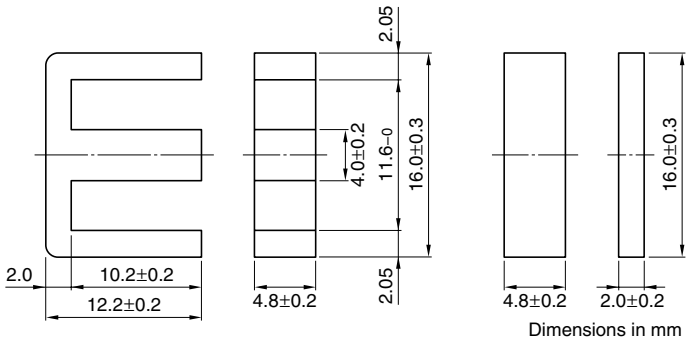
Temperature rise vs. Total loss for EI12.5 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI16 Cores
(JIS FEI 16)



Dimensions in mm

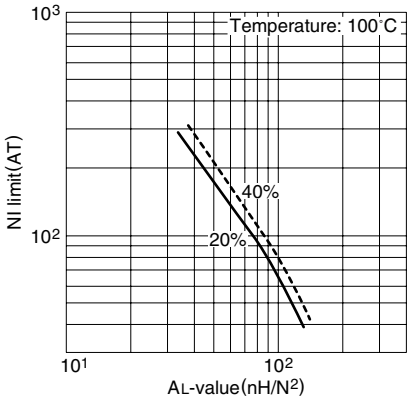
Parameter

Core factor	C_1	mm^{-1}	1.75
Effective magnetic path length	ℓe	mm	34.6
Effective cross-sectional area	Ae	mm^2	19.8
Effective core volume	Ve	mm^3	670
Cross-sectional center leg area	Acp	mm^2	19.2
Minimum cross-sectional area	Acp min.	mm^2	17.5
Cross-sectional winding area of core	Acw	mm^2	40.3
Weight (approx.)		g	3.3

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI16-Z	1100±25% (1kHz, 0.5mA)* 1750 min. (100kHz, 200mT)	0.31 max.	29W (100kHz)

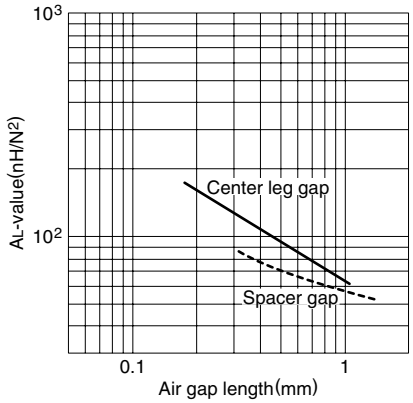
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI16 gapped core (Typical)



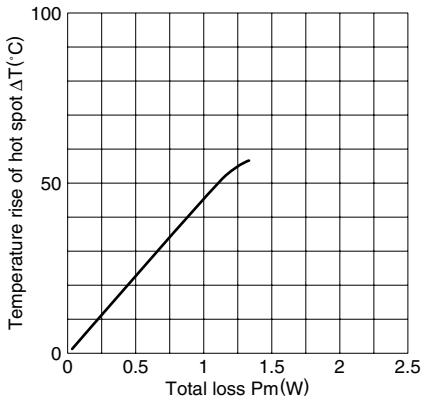
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI16 core (Typical)

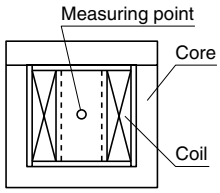


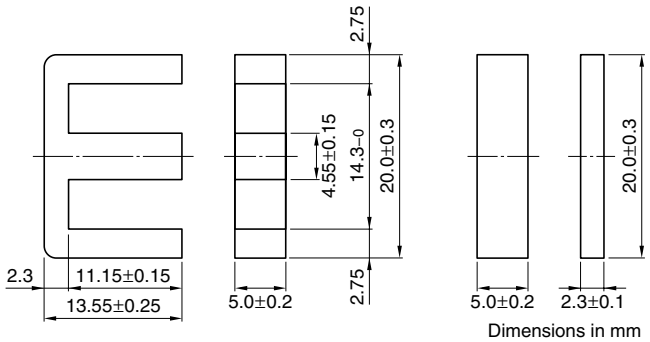
Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EI16 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

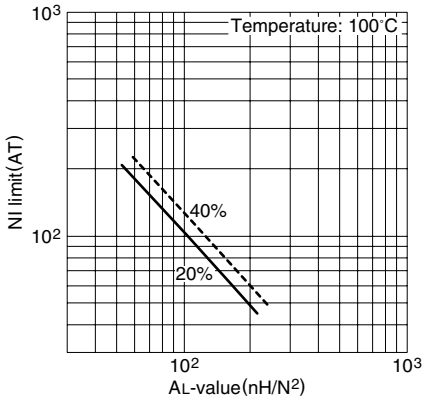
Parameter

Core factor	C_1	mm^{-1}	1.65
Effective magnetic path length	ℓe	mm	39.6
Effective cross-sectional area	Ae	mm^2	24.0
Effective core volume	Ve	mm^3	950
Cross-sectional center leg area	Acp	mm^2	22.8
Minimum cross-sectional area	Acp min.	mm^2	21.1
Cross-sectional winding area of core	Acw	mm^2	55.5
Weight (approx.)		g	5.1

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI19-Z	1400±25% (1kHz, 0.5mA)* 1930 min. (100kHz, 200mT)	0.42 max.	40W (100kHz)

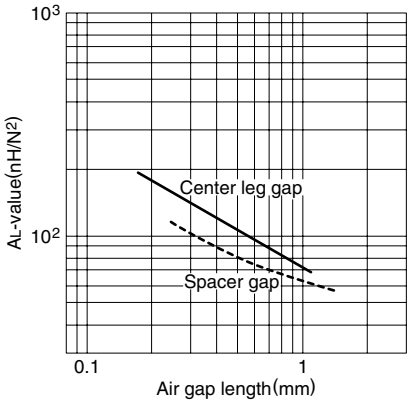
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI19 gapped core (Typical)



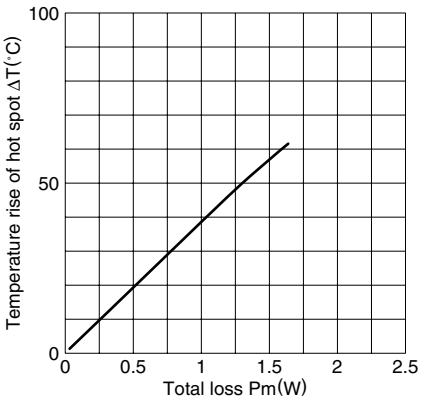
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI19 core (Typical)

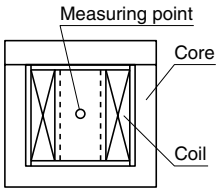


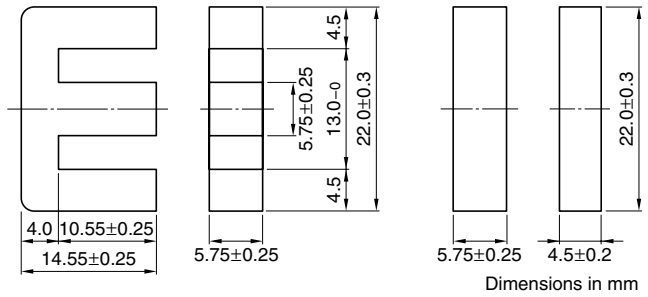
Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EI19 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

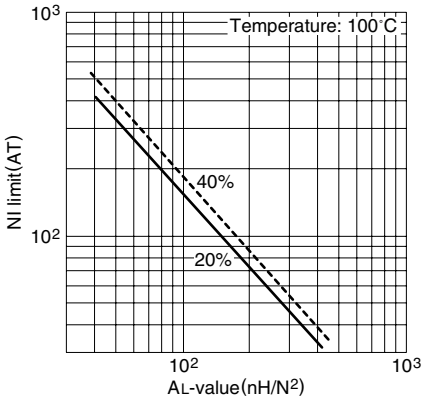
Parameter

Core factor	C_1	mm^{-1}	0.936
Effective magnetic path length	ℓe	mm	39.3
Effective cross-sectional area	Ae	mm^2	42.0
Effective core volume	Ve	mm^3	1630
Cross-sectional center leg area	Acp	mm^2	33.1
Minimum cross-sectional area	Acp min.	mm^2	30.3
Cross-sectional winding area of core	Acw	mm^2	38.2
Weight (approx.)		g	9.8

Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI22-Z	2400±25% (1kHz, 0.5mA)* 3360 min. (100kHz, 200mT)	0.60 max.	33W (100kHz)

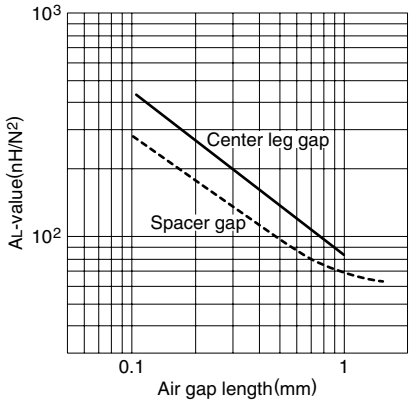
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI22 gapped core (Typical)



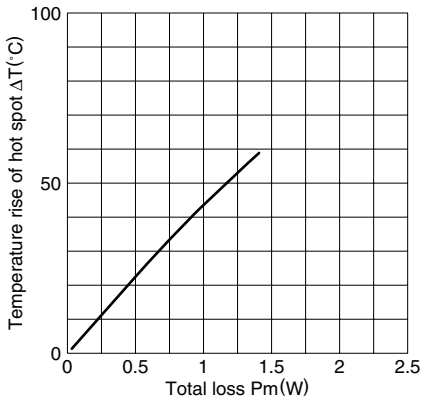
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI22 core (Typical)

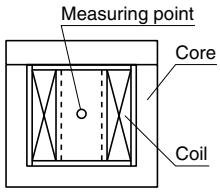


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

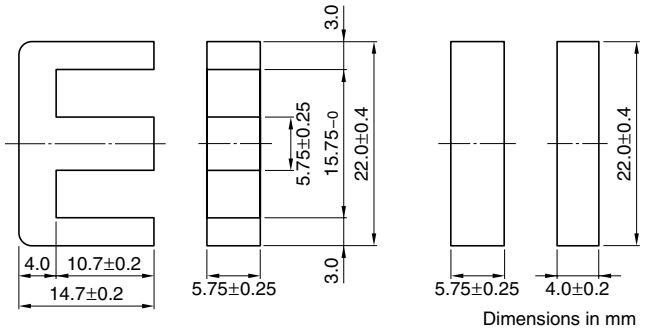
Temperature rise vs. Total loss for EI22 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI22/19/6 Cores
(JIS FEI 22)



Dimensions in mm

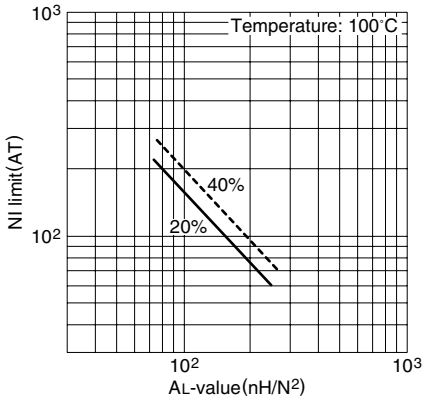
Parameter

Core factor	C_1	mm^{-1}	1.13
Effective magnetic path length	ℓe	mm	41.8
Effective cross-sectional area	Ae	mm^2	37.0
Effective core volume	Ve	mm^3	1550
Cross-sectional center leg area	Acp	mm^2	33.1
Minimum cross-sectional area	Acp min.	mm^2	30.3
Cross-sectional winding area of core	Acw	mm^2	54.8
Weight (approx.)		g	8.5

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI22/19/6-Z	2000±25% (1kHz, 0.5mA)* 2780 min. (100kHz, 200mT)	0.64 max.	48W (100kHz)

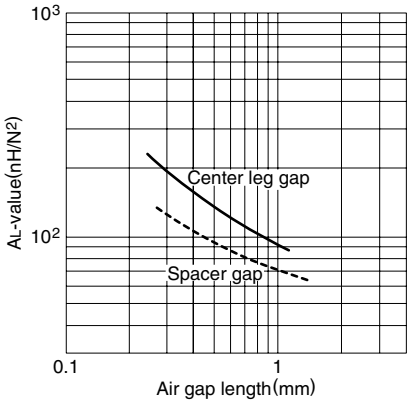
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI22/19/6 gapped core (Typical)



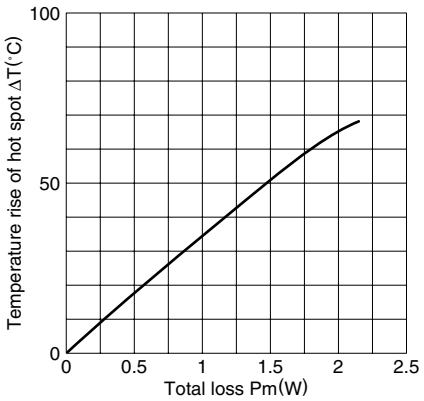
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI22/19/6 core (Typical)

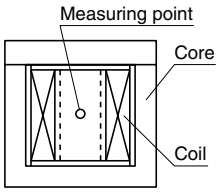


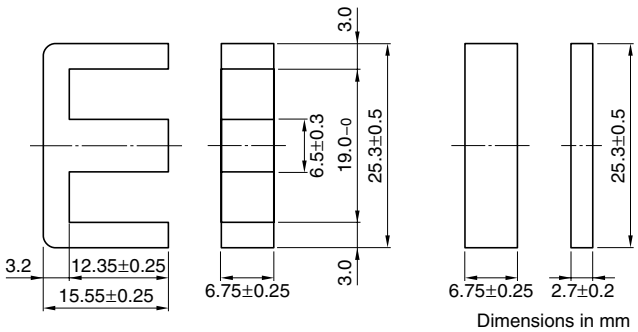
Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EI22/19/6 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

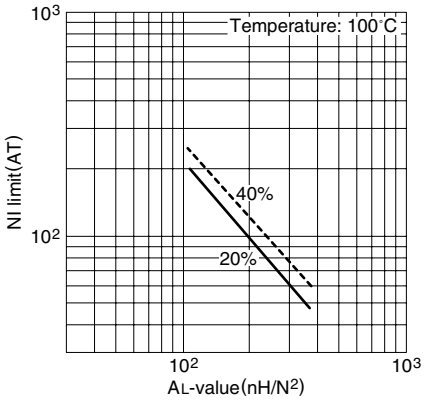
Parameter

Core factor	C_1	mm^{-1}	1.15
Effective magnetic path length	ℓe	mm	47.0
Effective cross-sectional area	Ae	mm^2	41.0
Effective core volume	Ve	mm^3	1930
Cross-sectional center leg area	Acp	mm^2	43.9
Minimum cross-sectional area	Acp min.	mm^2	40.3
Cross-sectional winding area of core	Acw	mm^2	77.2
Weight (approx.)		g	9.8

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI25-Z	2140±25% (1kHz, 0.5mA)* 2950 min. (100kHz, 200mT)	0.79 max.	68W (100kHz)

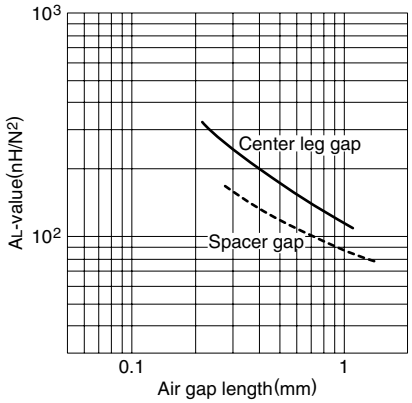
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI25 gapped core (Typical)



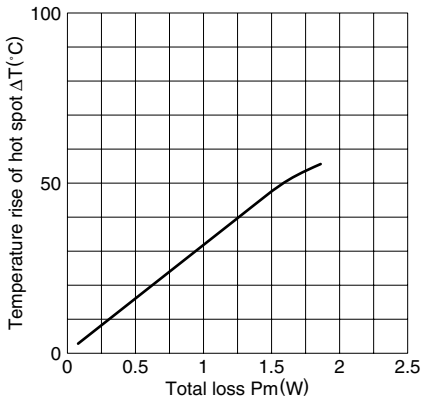
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI25 core (Typical)

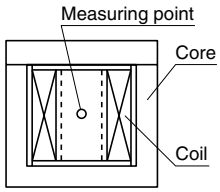


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

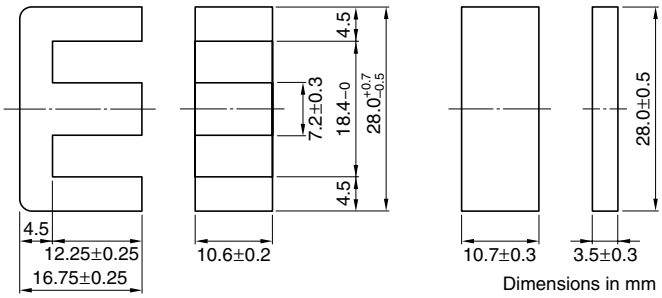
Temperature rise vs. Total loss for EI25 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI28 Cores
(JIS FEI 28)



Dimensions in mm

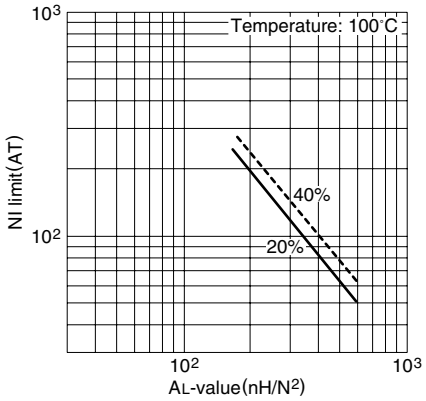
Parameter

Core factor	C_1	mm^{-1}	0.560
Effective magnetic path length	ℓe	mm	48.2
Effective cross-sectional area	Ae	mm^2	86.0
Effective core volume	Ve	mm^3	4150
Cross-sectional center leg area	Acp	mm^2	76.3
Minimum cross-sectional area	Acp min.	mm^2	71.8
Cross-sectional winding area of core	Acw	mm^2	69.8
Weight (approx.)		g	22

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI28-Z	4300±25% (1kHz, 0.5mA)* 6060 min. (100kHz, 200mT)	1.65 max.	107W (100kHz)

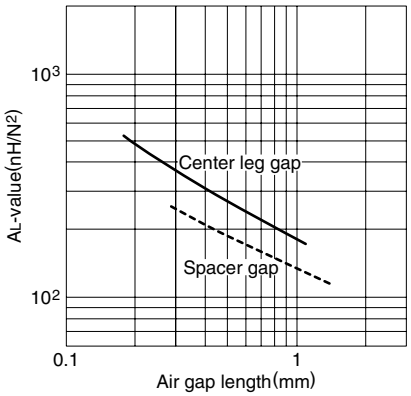
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI28 gapped core (Typical)



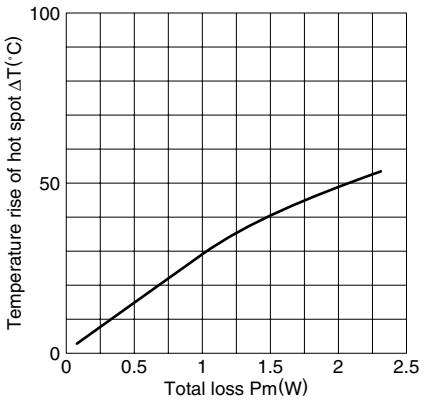
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI28 core (Typical)

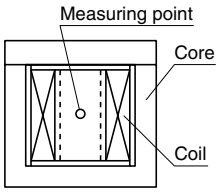


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

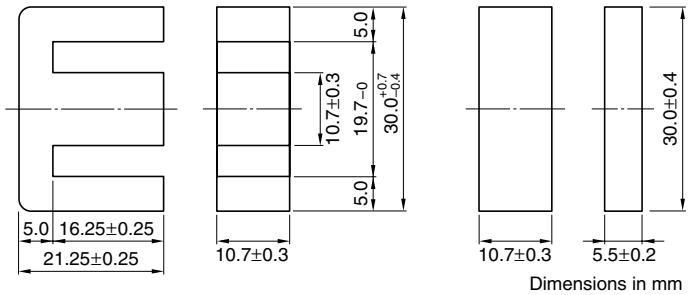
Temperature rise vs. Total loss for EI28 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI30 Cores
(JIS FEI 30)



Dimensions in mm

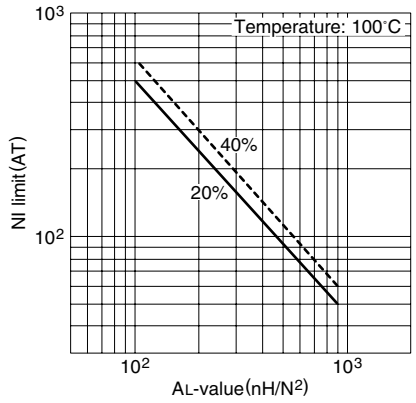
Parameter

Core factor	C_1	mm^{-1}	0.522
Effective magnetic path length	ℓe	mm	58.0
Effective cross-sectional area	Ae	mm^2	111
Effective core volume	Ve	mm^3	6440
Cross-sectional center leg area	Acp	mm^2	114
Minimum cross-sectional area	Acp min.	mm^2	108
Cross-sectional winding area of core	Acw	mm^2	75.6
Weight (approx.)		g	34

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI30-Z	4690±25% (1kHz, 0.5mA)* 6500 min. (100kHz, 200mT)	3.1 max.	155W (100kHz)

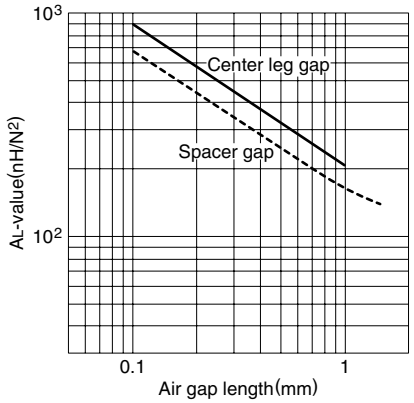
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI30 gapped core (Typical)



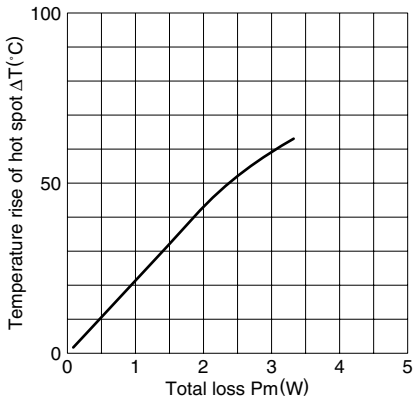
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI30 core (Typical)

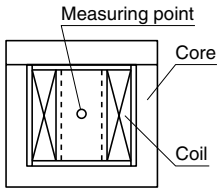


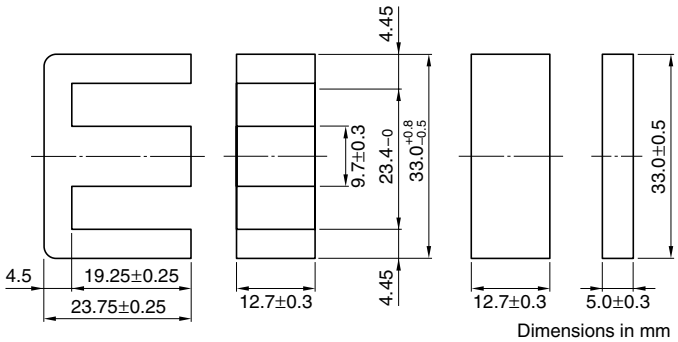
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EI30 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

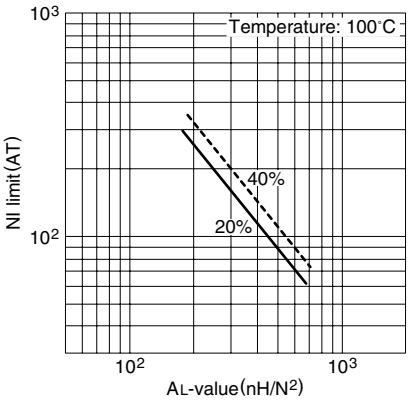
Parameter

Core factor	C_1	mm^{-1}	0.567
Effective magnetic path length	ℓe	mm	67.5
Effective cross-sectional area	Ae	mm^2	119
Effective core volume	Ve	mm^3	8030
Cross-sectional center leg area	Acp	mm^2	123
Minimum cross-sectional area	Acp min.	mm^2	117
Cross-sectional winding area of core	Acw	mm^2	138.6
Weight (approx.)		g	41

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI33/29/13-Z	4400±25% (1kHz, 0.5mA)* 5980 min. (100kHz, 200mT)	3.5 max.	206W (100kHz)

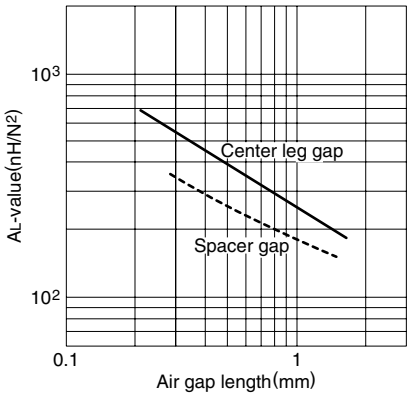
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EI33/29/13 gapped core (Typical)



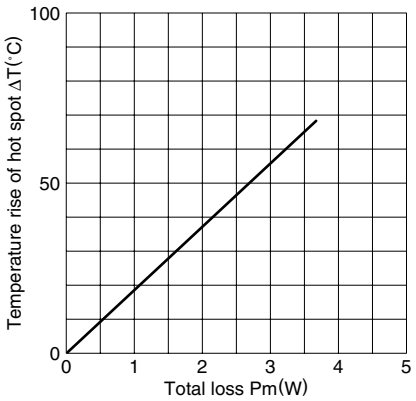
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EI33/29/13 core (Typical)

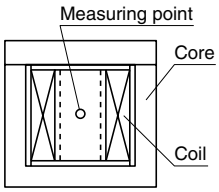


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

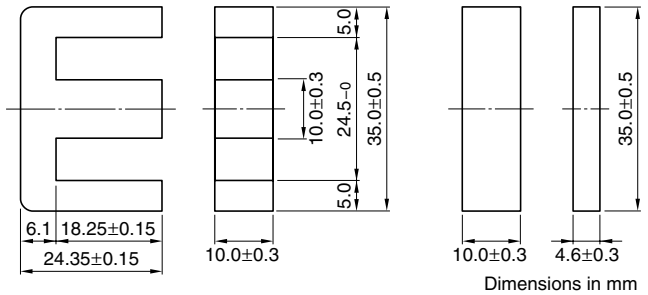
Temperature rise vs. Total loss for EI33/29/13 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI35 Cores
(JIS FEI 35)



Dimensions in mm

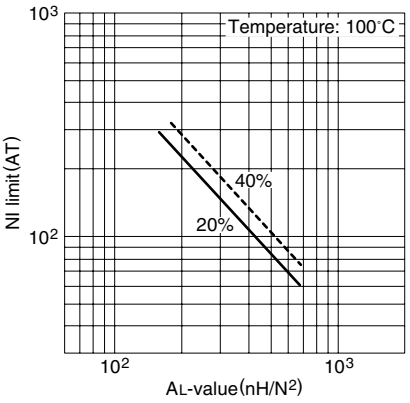
Parameter

Core factor	C_1	mm^{-1}	0.664
Effective magnetic path length	ℓe	mm	67.1
Effective cross-sectional area	Ae	mm^2	101
Effective core volume	Ve	mm^3	6780
Cross-sectional center leg area	Acp	mm^2	100
Minimum cross-sectional area	Acp min.	mm^2	94.1
Cross-sectional winding area of core	Acw	mm^2	131.6
Weight (approx.)		g	36

Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI35-Z	3800±25% (1kHz, 0.5mA)* 5110 min. (100kHz, 200mT)	2.85 max.	218W (100kHz)

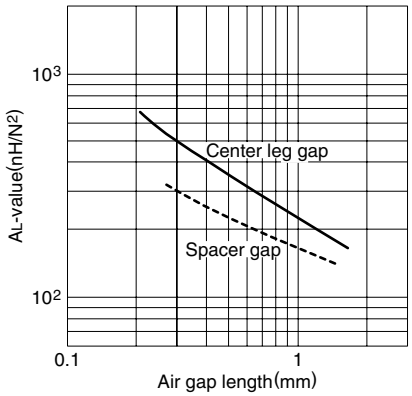
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI35 gapped core (Typical)



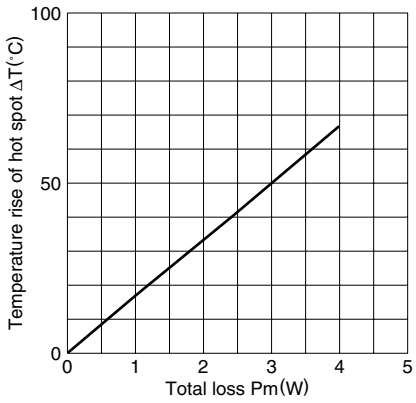
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI35 core (Typical)

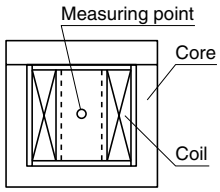


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

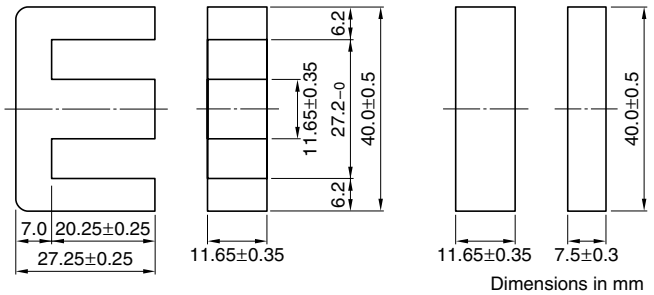
Temperature rise vs. Total loss for EI35 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI40 Cores
(JIS FEI 40)



Dimensions in mm

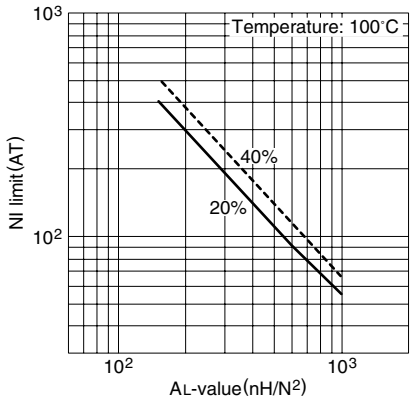
Parameter

Core factor	C_1	mm^{-1}	0.520
Effective magnetic path length	ℓe	mm	77.0
Effective cross-sectional area	Ae	mm^2	148
Effective core volume	Ve	mm^3	11400
Cross-sectional center leg area	Acp	mm^2	136
Minimum cross-sectional area	Acp min.	mm^2	128
Cross-sectional winding area of core	Acw	mm^2	160.5
Weight (approx.)		g	60

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI40-Z	4860±25% (1kHz, 0.5mA)* 6520 min. (100kHz, 200mT)	4.8 max.	348W (100kHz)

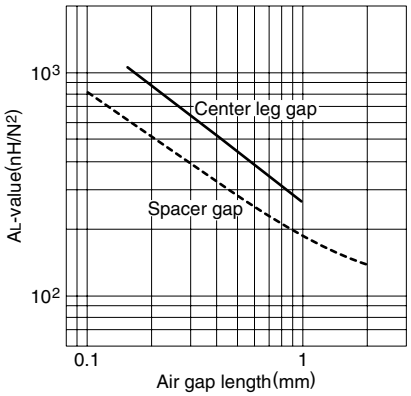
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI40 gapped core (Typical)



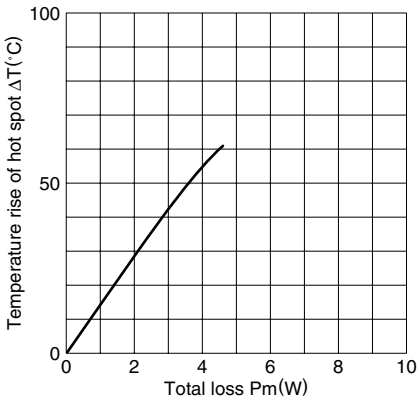
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI40 core (Typical)

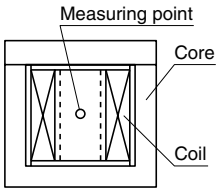


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

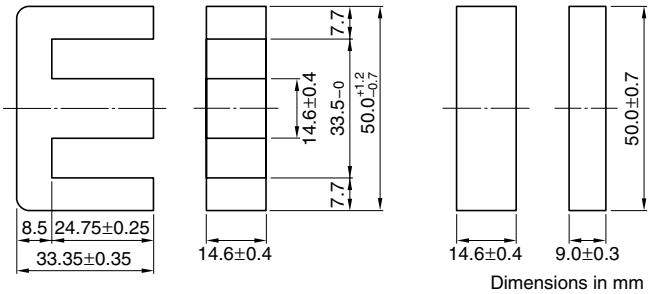
Temperature rise vs. Total loss for EI40 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI50 Cores
(JIS FEI 50)



Dimensions in mm

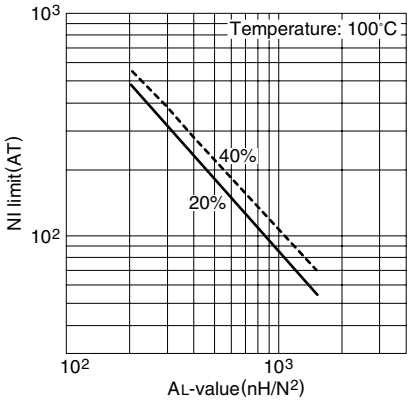
Parameter

Core factor	C_1	mm^{-1}	0.409
Effective magnetic path length	ℓe	mm	94.0
Effective cross-sectional area	Ae	mm^2	230
Effective core volume	Ve	mm^3	21620
Cross-sectional center leg area	Acp	mm^2	213
Minimum cross-sectional area	Acp min.	mm^2	202
Cross-sectional winding area of core	Acw	mm^2	246.3
Weight (approx.)		g	115

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI50-Z	6110±25% (1kHz, 0.5mA)* 8300 min. (100kHz, 200mT)	9.2 max.	508W (100kHz)

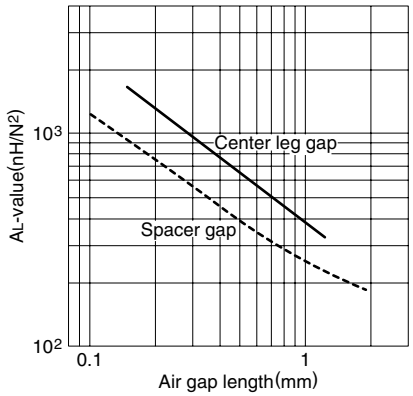
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI50 gapped core (Typical)



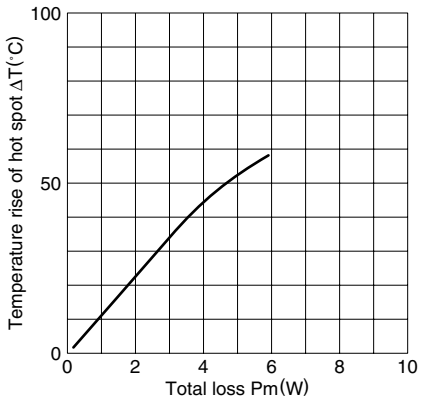
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI50 core (Typical)

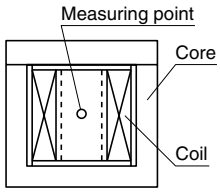


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

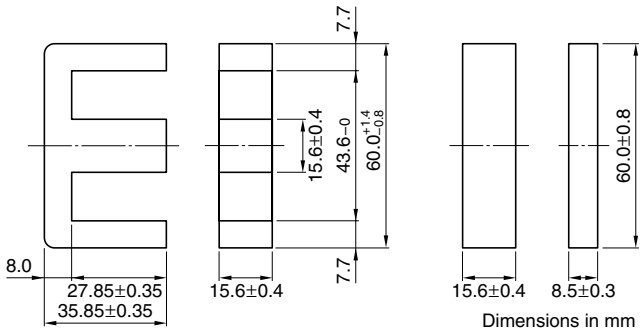
Temperature rise vs. Total loss for EI50 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EI60 Cores
(JIS FEI 60)



Dimensions in mm

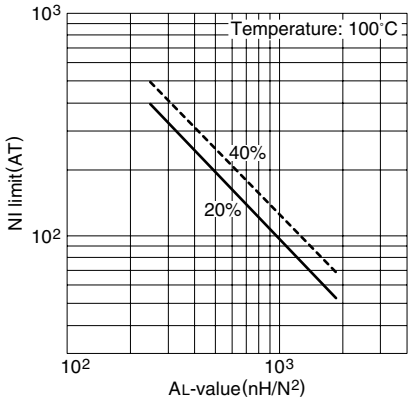
Parameter

Core factor	C_1	mm^{-1}	0.441
Effective magnetic path length	ℓe	mm	109
Effective cross-sectional area	Ae	mm^2	247
Effective core volume	Ve	mm^3	26900
Cross-sectional center leg area	Acp	mm^2	243
Minimum cross-sectional area	Acp min.	mm^2	231
Cross-sectional winding area of core	Acw	mm^2	402.4
Weight (approx.)		g	139

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EI60-Z	5670±25% (1kHz, 0.5mA)* 7690 min. (100kHz, 200mT)	12.5 max.	618W (100kHz)

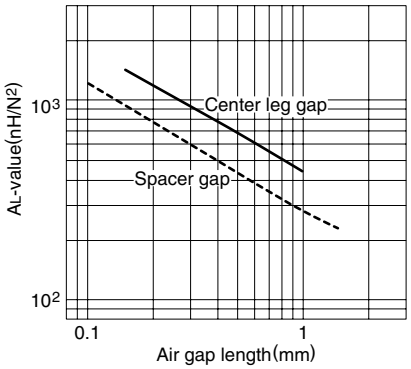
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EI60 gapped core (Typical)



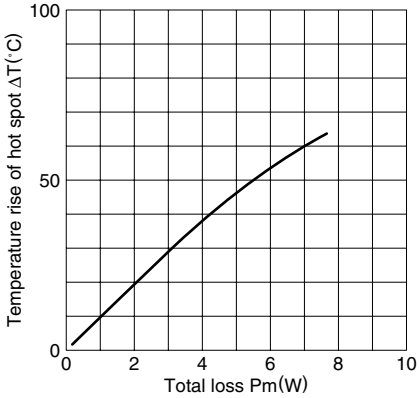
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EI60 core (Typical)

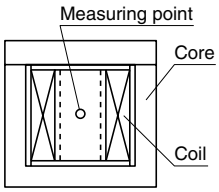


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

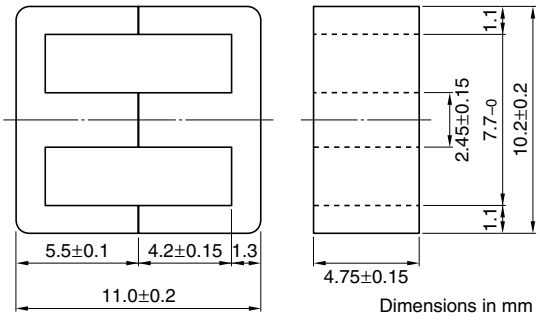
Temperature rise vs. Total loss for EI60 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE10/11 Cores
(JIS FEE 10.2)



Dimensions in mm

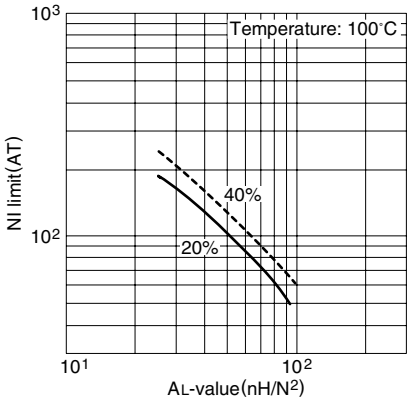
Parameter

Core factor	C_1	mm^{-1}	2.16
Effective magnetic path length	ℓe	mm	26.1
Effective cross-sectional area	Ae	mm^2	12.1
Effective core volume	Ve	mm^3	315
Cross-sectional center leg area	Acp	mm^2	11.6
Minimum cross-sectional area	Acp min.	mm^2	10.6
Cross-sectional winding area of core	Acw	mm^2	23.3
Weight (approx.)		g	1.5

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE10/11-Z	850±25% (1kHz, 0.5mA)* 1450 min. (100kHz, 200mT)	0.14 max.	9.4W (100kHz)

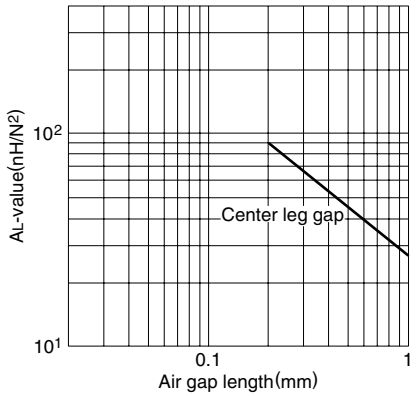
* *Coil: ø0.18 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE10/11 gapped core (Typical)



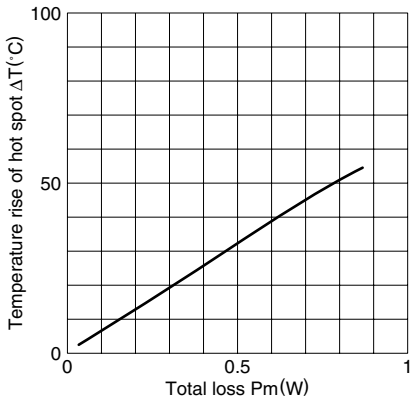
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE10/11 core (Typical)

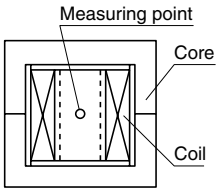


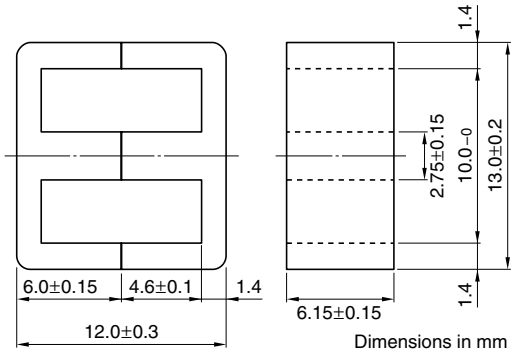
Measuring conditions • Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE10/11 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

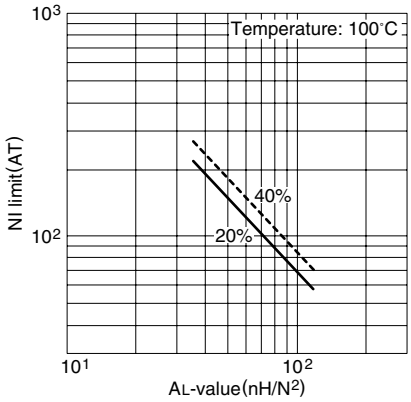
Parameter

Core factor	C_1	mm^{-1}	1.77
Effective magnetic path length	ℓe	mm	30.2
Effective cross-sectional area	Ae	mm^2	17.1
Effective core volume	Ve	mm^3	517
Cross-sectional center leg area	Acp	mm^2	16.9
Minimum cross-sectional area	Acp min.	mm^2	15.6
Cross-sectional winding area of core	Acw	mm^2	34.3
Weight (approx.)		g	2.7

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE13-Z	1130±25% (1kHz, 0.5mA)* 1770 min. (100kHz, 200mT)	0.235 max.	17W (100kHz)

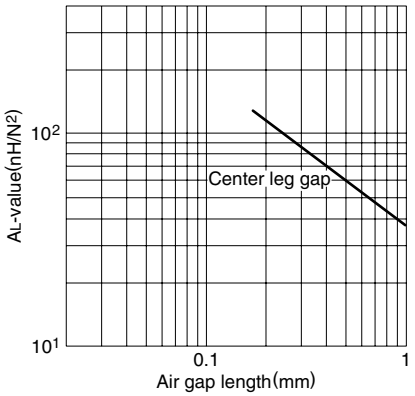
* *Coil: ø0.18 2UEW 100Ts*

NI limit vs. AL-value for PC40EE13 gapped core (Typical)



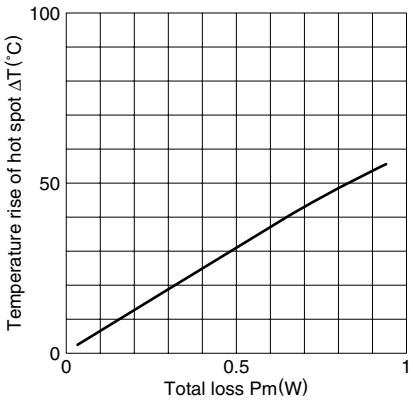
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE13 core (Typical)

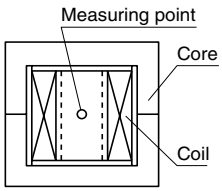


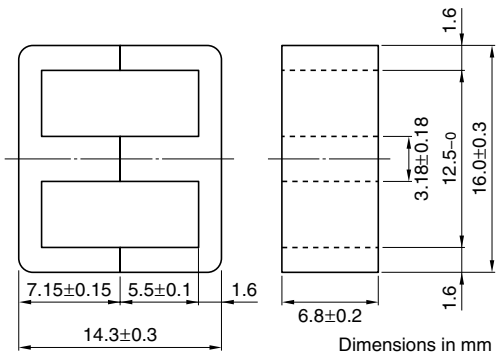
Measuring conditions • Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE13 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

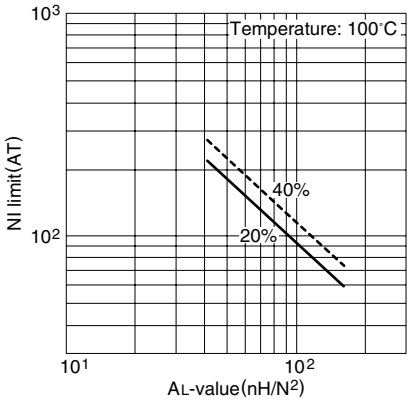
Parameter

Core factor	C_1	mm^{-1}	1.69
Effective magnetic path length	ℓe	mm	36.6
Effective cross-sectional area	Ae	mm^2	21.7
Effective core volume	Ve	mm^3	795
Cross-sectional center leg area	Acp	mm^2	21.6
Minimum cross-sectional area	Acp min.	mm^2	19.8
Cross-sectional winding area of core	Acw	mm^2	52.9
Weight (approx.)		g	4.1

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40SEE16-Z	1240±25% (1kHz, 0.5mA)* 1850 min. (100kHz, 200mT)	0.37 max.	32W (100kHz)

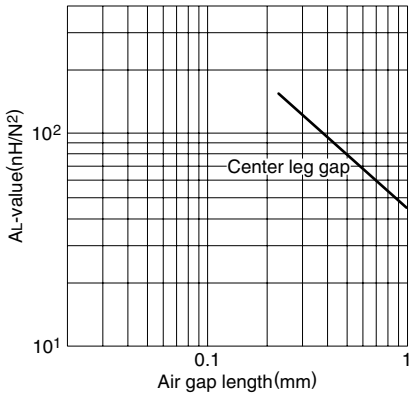
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40SEE16 gapped core (Typical)



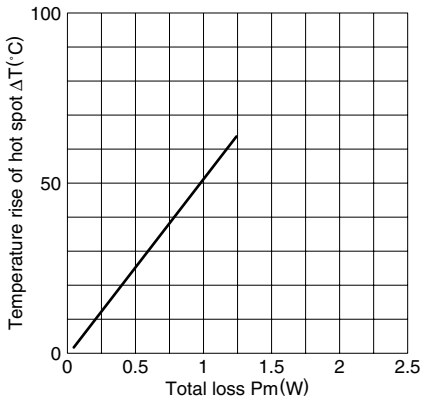
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40SEE16 core (Typical)

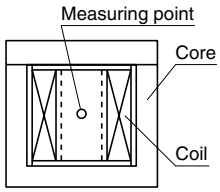


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for SEE16 core (Typical) (Ambient temperature: 25°C)

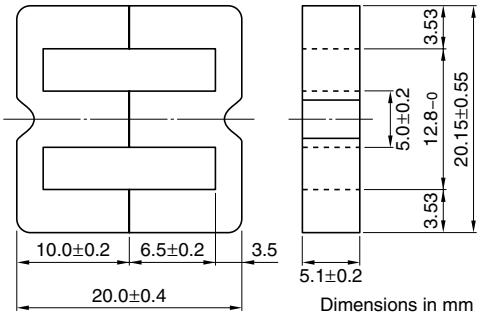


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE20/20/5 Cores
(DIN 41295)

Based on DIN 41295.



Dimensions in mm

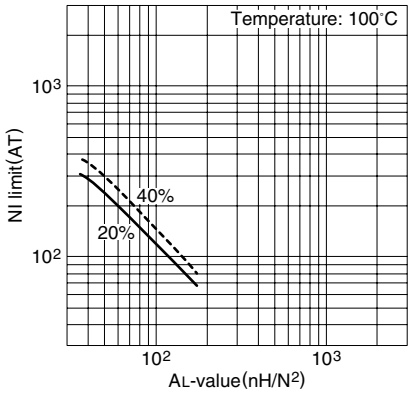
Parameter

Core factor	C_1	mm^{-1}	1.38
Effective magnetic path length	ℓe	mm	43.0
Effective cross-sectional area	Ae	mm^2	31.0
Effective core volume	Ve	mm^3	1340
Cross-sectional center leg area	Acp	mm^2	25.5
Minimum cross-sectional area	Acp min.	mm^2	23.5
Cross-sectional winding area of core	Acw	mm^2	41.3
Weight (approx.)		g	7.5

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE20/20/5-Z	1400±25% (1kHz, 0.5mA)* 2270 min. (100kHz, 200mT)	0.51 max.	41W (100kHz)

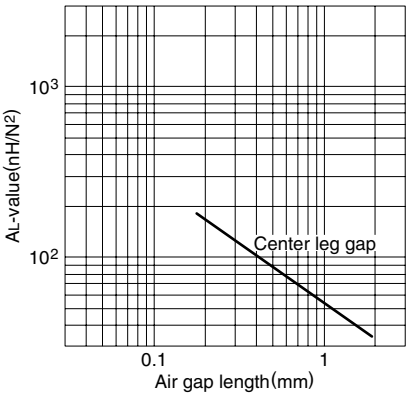
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE20/20/5 gapped core (Typical)



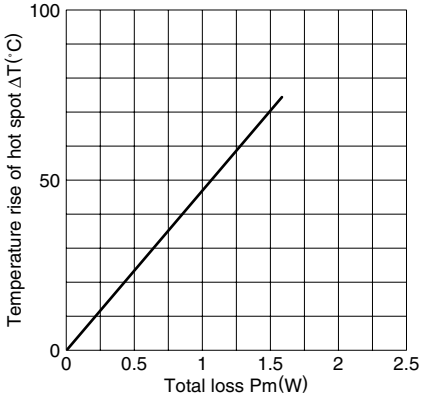
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE20/20/5 core (Typical)

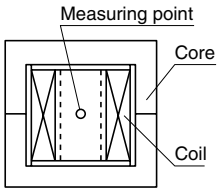


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE20/20/5 core (Typical) (Ambient temperature: 25°C)

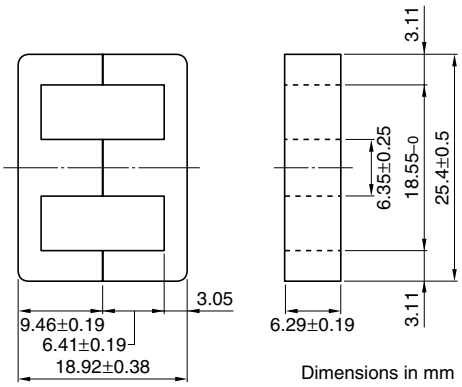


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE25/19 Cores
(EE-24/25)

Based on standard U. S. lamination size.



Dimensions in mm

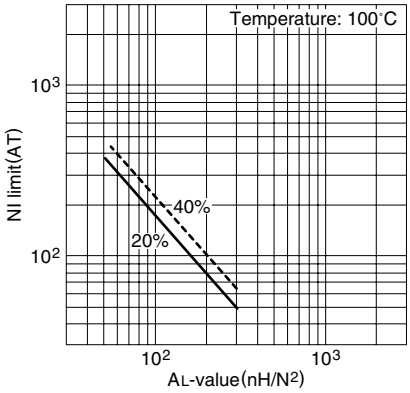
Parameter

Core factor	C_1	mm^{-1}	1.22
Effective magnetic path length	ℓe	mm	48.7
Effective cross-sectional area	Ae	mm^2	40.0
Effective core volume	Ve	mm^3	1950
Cross-sectional center leg area	Acp	mm^2	39.9
Minimum cross-sectional area	Acp min.	mm^2	37.2
Cross-sectional winding area of core	Acw	mm^2	79.0
Weight (approx.)		g	9.1

Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE25/19-Z	2000±25% (1kHz, 0.5mA)* 2570 min. (100kHz, 200mT)	0.86 max.	70W (100kHz)

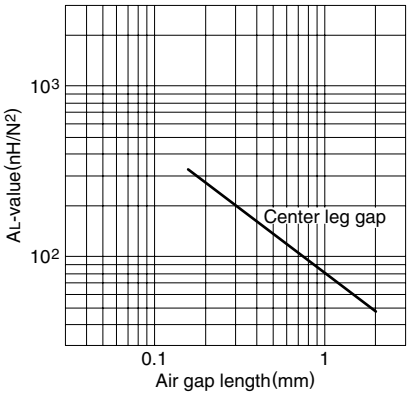
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE25/19 gapped core (Typical)



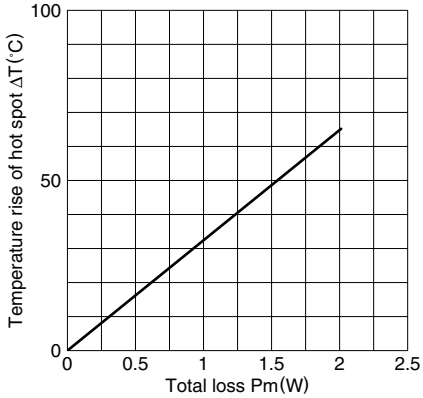
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE25/19 core (Typical)

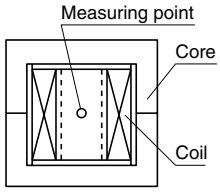


Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE25/19 core (Typical) (Ambient temperature: 25°C)

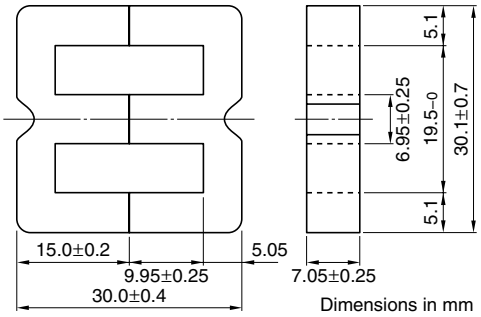


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE30/30/7 Cores
(DIN 41295)

Based on DIN 41295



Dimensions in mm

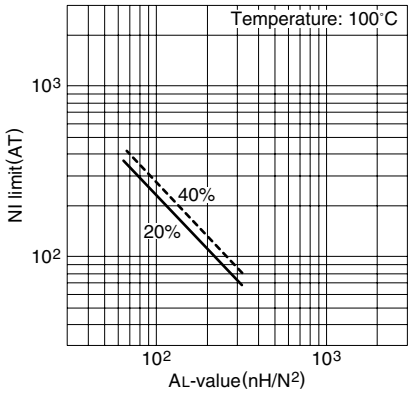
Parameter

Core factor	C_1	mm^{-1}	1.12
Effective magnetic path length	ℓe	mm	66.9
Effective cross-sectional area	Ae	mm^2	59.7
Effective core volume	Ve	mm^3	4000
Cross-sectional center leg area	Acp	mm^2	49.0
Minimum cross-sectional area	Acp min.	mm^2	45.6
Cross-sectional winding area of core	Acw	mm^2	129
Weight (approx.)		g	22

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE30/30/7-Z	2100±25% (1kHz, 0.5mA)* 3030 min. (100kHz, 200mT)	1.51 max.	133W (100kHz)

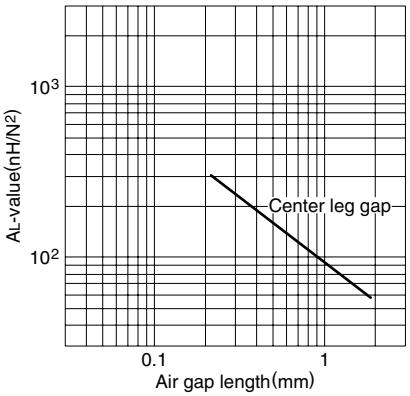
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE30/30/7 gapped core (Typical)



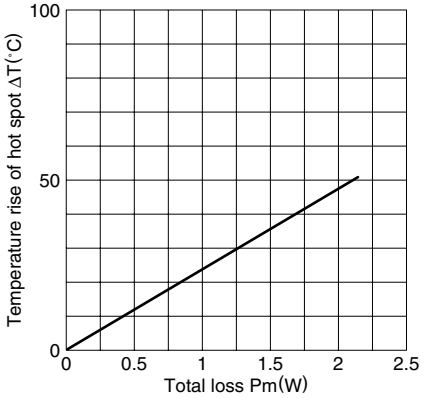
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE30/30/7 core (Typical)

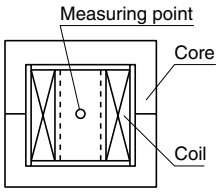


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE30/30/7 core (Typical) (Ambient temperature: 25°C)

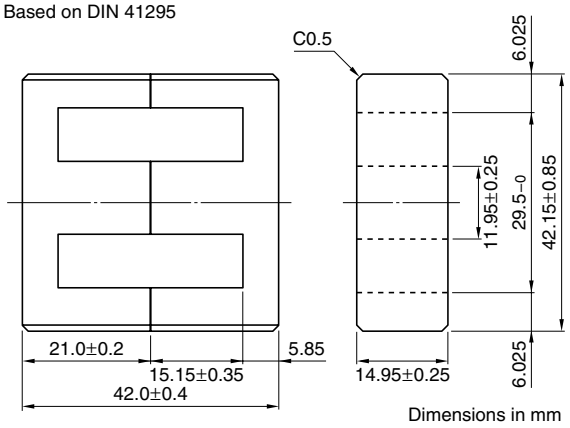


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE42/42/15 Cores
(DIN 41295)

Based on DIN 41295



Dimensions in mm

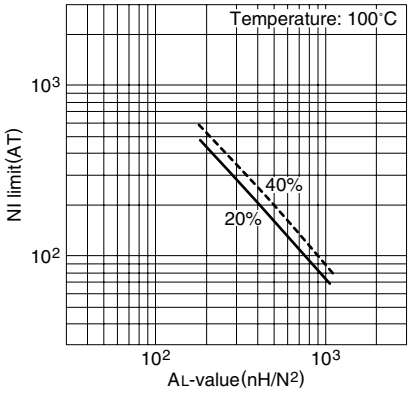
Parameter

Core factor	C_1	mm^{-1}	0.547
Effective magnetic path length	ℓe	mm	97.4
Effective cross-sectional area	Ae	mm^2	178
Effective core volume	Ve	mm^3	17400
Cross-sectional center leg area	Acp	mm^2	179
Minimum cross-sectional area	Acp min.	mm^2	172
Cross-sectional winding area of core	Acw	mm^2	275
Weight (approx.)		g	80

Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE42/42/15-Z	4700±25% (1kHz, 0.5mA)* 7050 min. (100kHz, 200mT)	8.0 max.	419W (100kHz)

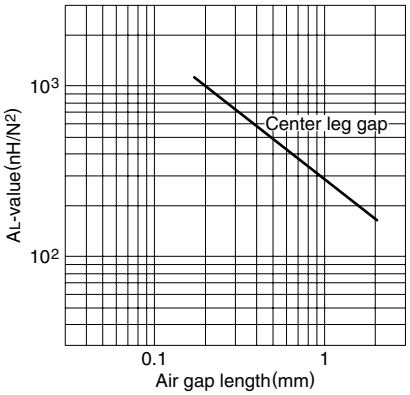
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE42/42/15 gapped core (Typical)



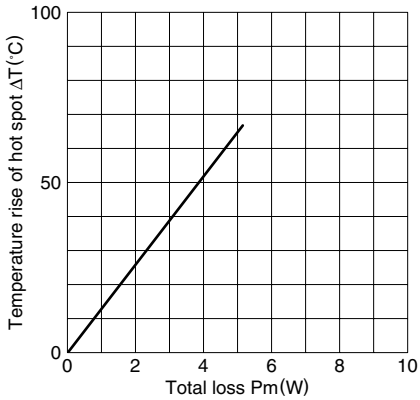
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE42/42/15 core (Typical)

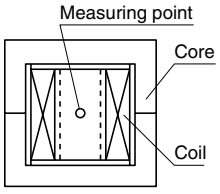


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE42/42/15 core (Typical) (Ambient temperature: 25°C)

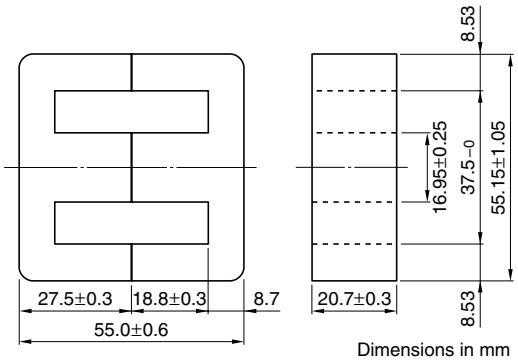


Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EE55/55/21 Cores
(DIN 41295)

Based on DIN 41295



Dimensions in mm

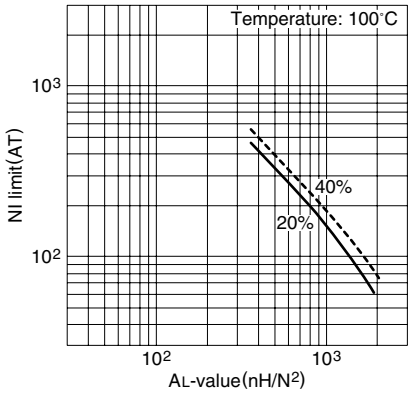
Parameter

Core factor	C_1	mm^{-1}	0.348
Effective magnetic path length	ℓe	mm	123
Effective cross-sectional area	Ae	mm^2	354
Effective core volume	Ve	mm^3	43700
Cross-sectional center leg area	Acp	mm^2	351
Minimum cross-sectional area	Acp min.	mm^2	341
Cross-sectional winding area of core	Acw	mm^2	397
Weight (approx.)		g	234

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE55/55/21-Z	7100±25% (1kHz, 0.5mA)* 10830 min. (100kHz, 200mT)	11.0 max.	814W (100kHz)

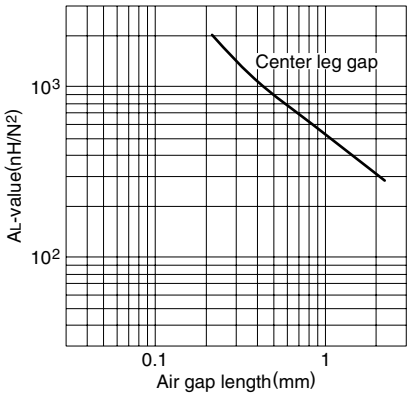
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE55/55/21 gapped core (Typical)



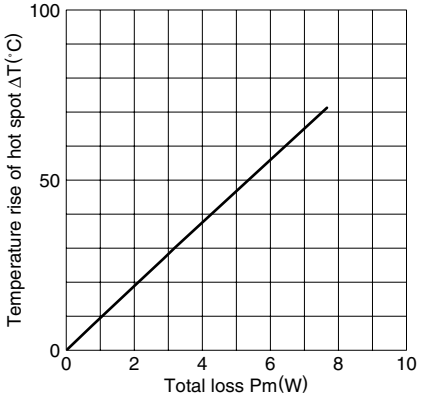
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE55/55/21 core (Typical)

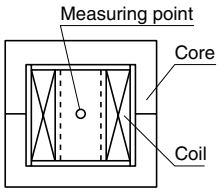


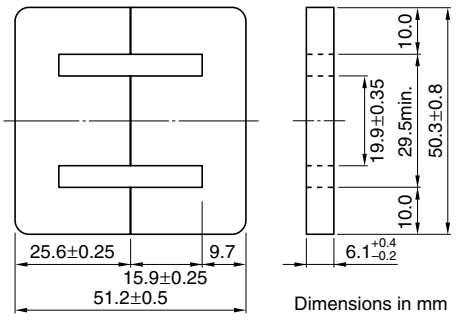
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE55/55/21 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

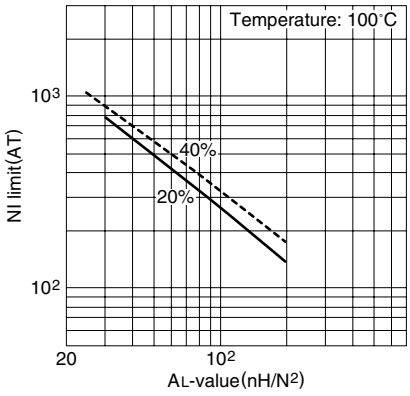
Parameter

Core factor	C_1	mm^{-1}	0.868
Effective magnetic path length	ℓe	mm	105
Effective cross-sectional area	Ae	mm^2	121
Effective core volume	Ve	mm^3	12700
Cross-sectional center leg area	Acp	mm^2	121.39
Minimum cross-sectional area	Acp min.	mm^2	115.345
Cross-sectional winding area of core	Acw	mm^2	163.3
Weight (approx.)		g	34

Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE50.3/51/6-Z	2900±25% (1kHz, 0.5mA)* 3900 min. (100kHz, 200mT)	5.83 max.	213W (100kHz)

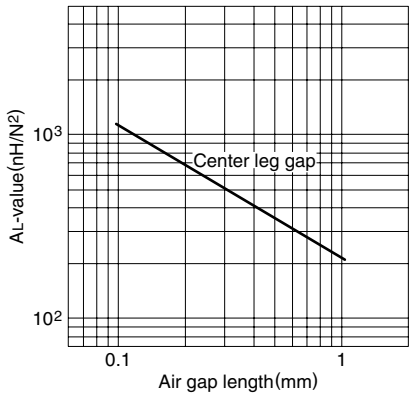
* *Coil: ø0.23 2UEW 100Ts*

NI limit vs. A_L-value for PC40EE50.3/51/6 gapped core (Typical)



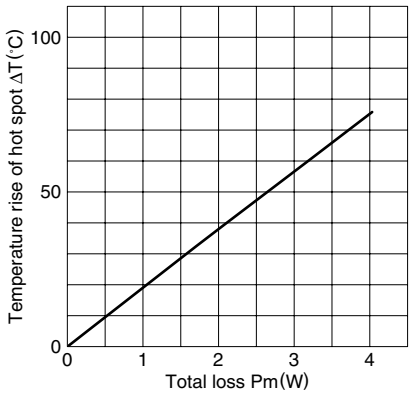
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EE50.3/51/6 core (Typical)

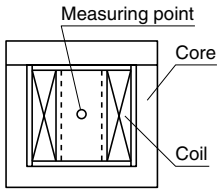


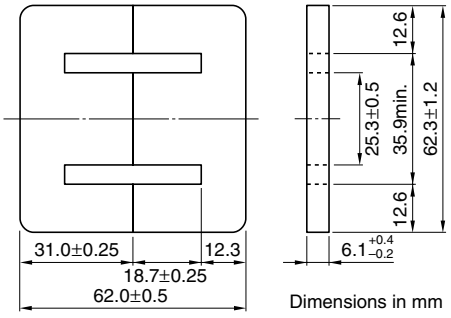
Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EE50.3/51/6 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

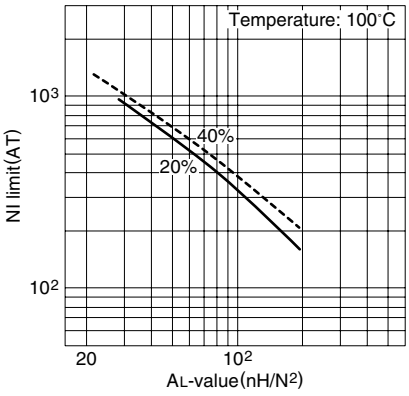
Parameter

Core factor	C_1	mm^{-1}	0.823
Effective magnetic path length	ℓe	mm	126
Effective cross-sectional area	Ae	mm^2	153
Effective core volume	Ve	mm^3	19300
Cross-sectional center leg area	Acp	mm^2	154
Minimum cross-sectional area	Acp min.	mm^2	146.3
Cross-sectional winding area of core	Acw	mm^2	202
Weight (approx.)		g	52

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EE62.3/62/6-Z	3100±25% (1kHz, 0.5mA)* 4100 min. (100kHz, 200mT)	8.85 max.	250W (100kHz)

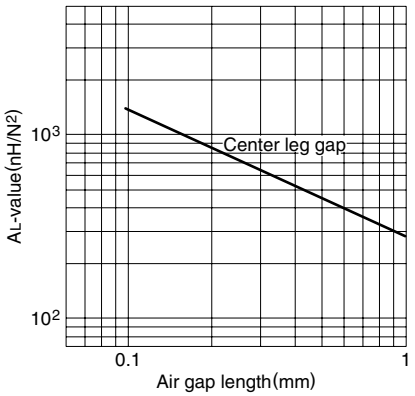
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EE62.3/62/6 gapped core (Typical)



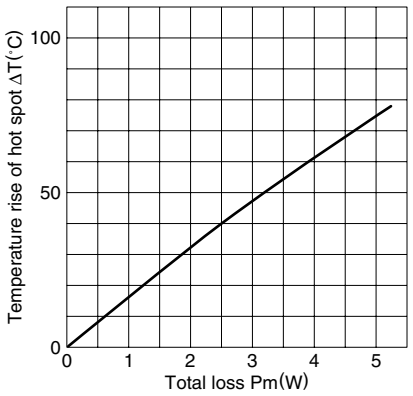
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EE62.3/62/6 core (Typical)

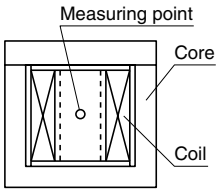


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

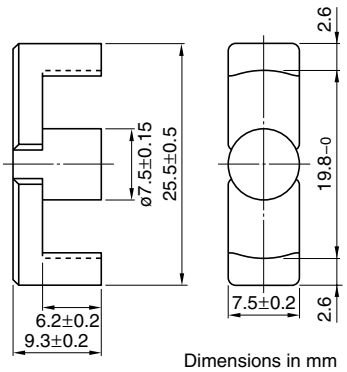
Temperature rise vs. Total loss for EE62.3/62/6 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER25.5 Cores
(JIS FEER 25.5A)



Dimensions in mm

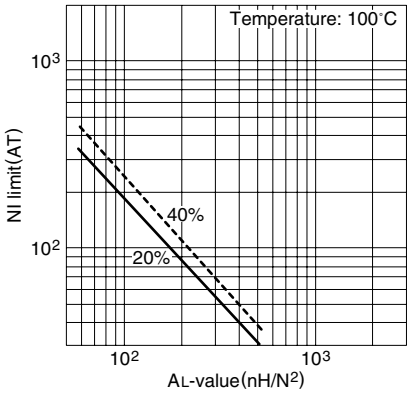
Parameter

Core factor	C_1	mm^{-1}	1.08
Effective magnetic path length	ℓe	mm	48.2
Effective cross-sectional area	Ae	mm^2	44.8
Effective core volume	Ve	mm^3	2160
Cross-sectional center pole area	Acp	mm^2	44.2
Minimum cross-sectional center pole area	Acp min.	mm^2	42.4
Cross-sectional winding area of core	Acw	mm^2	79.4
Weight (approx.)		g	11

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER25.5-Z	1920±25% (1kHz, 0.5mA)* 2910 min. (100kHz, 200mT)	0.98 max.	87W (100kHz)

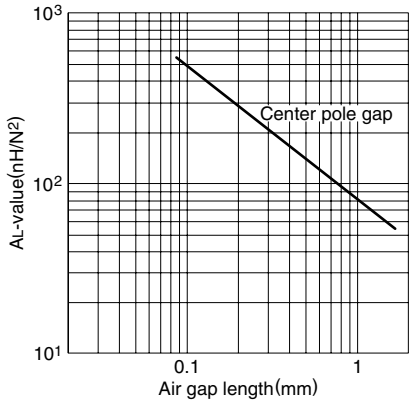
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER25.5 gapped core (Typical)



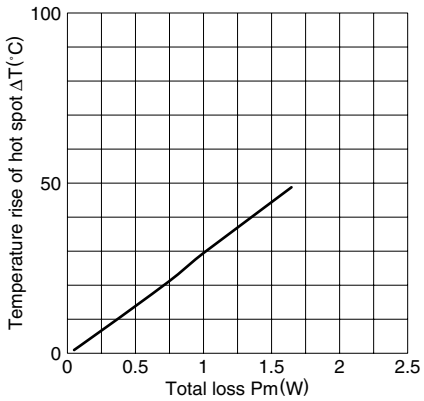
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER25.5 core (Typical)

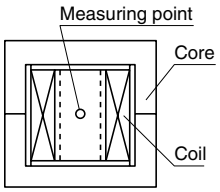


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

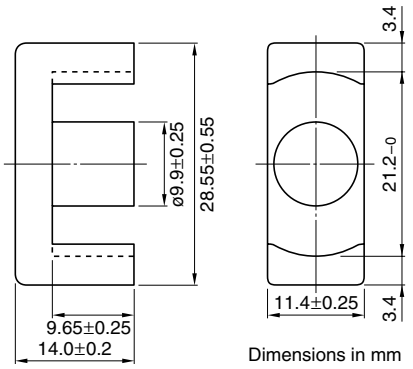
Temperature rise vs. Total loss for EER25.5 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER28 Cores
(JIS FEER 28.5A)



Dimensions in mm

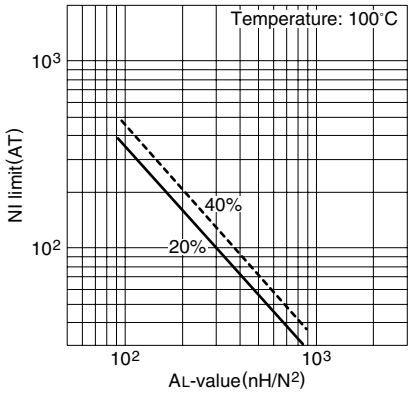
Parameter

Core factor	C_1	mm^{-1}	0.78
Effective magnetic path length	ℓe	mm	64.0
Effective cross-sectional area	Ae	mm^2	82.1
Effective core volume	Ve	mm^3	5250
Cross-sectional center pole area	Acp	mm^2	77.0
Minimum cross-sectional center pole area	Acp min.	mm^2	73.1
Cross-sectional winding area of core	Acw	mm^2	114
Weight (approx.)		g	28

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER28-Z	2870±25% (1kHz, 0.5mA)* 4350 min. (100kHz, 200mT)	2.3 max.	203W (100kHz)

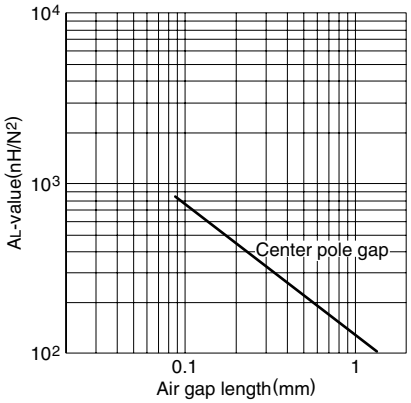
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER28 gapped core (Typical)



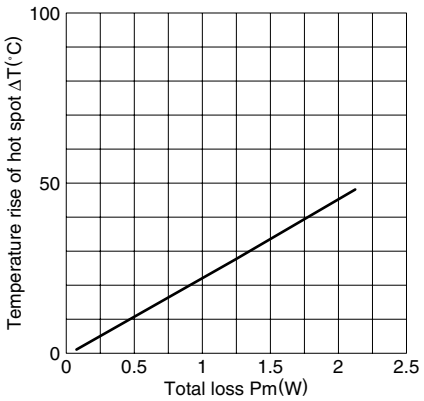
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER28 core (Typical)

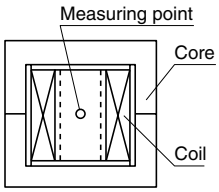


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

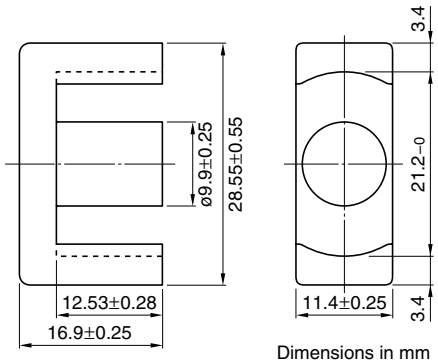
Temperature rise vs. Total loss for EER28 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER28L Cores
(JIS FEER 28.5B)



Dimensions in mm

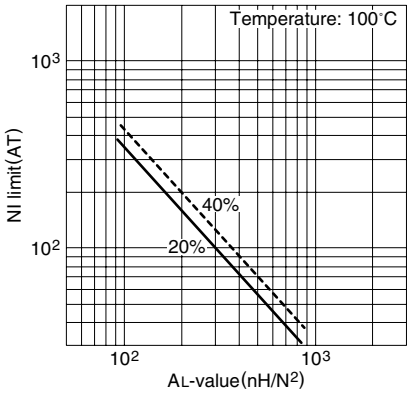
Parameter

Core factor	C_1	mm^{-1}	0.928
Effective magnetic path length	ℓe	mm	75.5
Effective cross-sectional area	Ae	mm^2	81.4
Effective core volume	Ve	mm^3	6150
Cross-sectional center pole area	Acp	mm^2	77.0
Minimum cross-sectional center pole area	Acp min.	mm^2	73.1
Cross-sectional winding area of core	Acw	mm^2	148
Weight (approx.)		g	33

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER28L-Z	2520±25% (1kHz, 0.5mA)* 3660 min. (100kHz, 200mT)	2.7 max.	228W (100kHz)

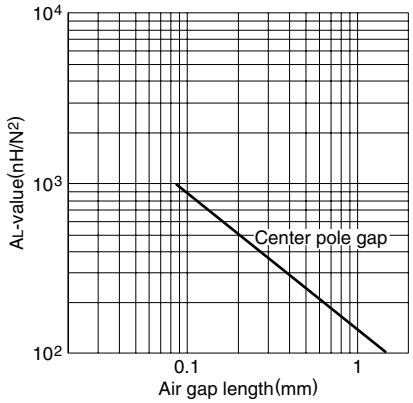
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER28L gapped core (Typical)



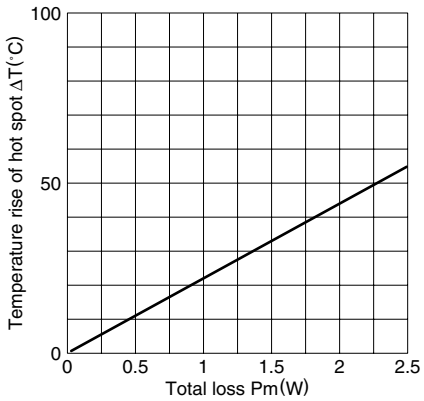
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER28L core (Typical)

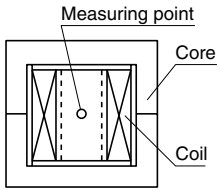


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

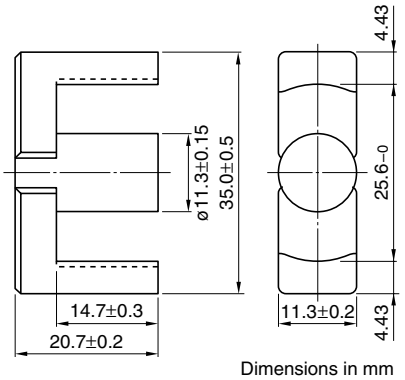
Temperature rise vs. Total loss for EER28L core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER35 Cores
(JIS FEER 35A)



Dimensions in mm

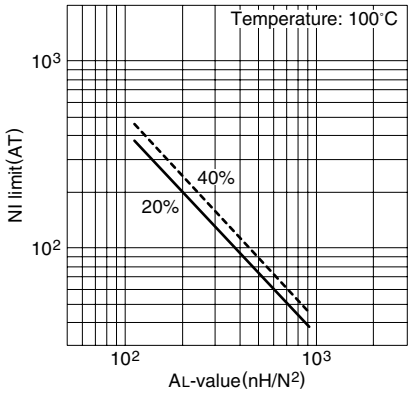
Parameter

Core factor	C_1	mm^{-1}	0.849
Effective magnetic path length	ℓe	mm	90.8
Effective cross-sectional area	Ae	mm^2	107
Effective core volume	Ve	mm^3	9720
Cross-sectional center pole area	Acp	mm^2	100
Minimum cross-sectional center pole area	Acp min.	mm^2	97.6
Cross-sectional winding area of core	Acw	mm^2	218
Weight (approx.)		g	52

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER35-Z	2770±25% (1kHz, 0.5mA)* 4000 min. (100kHz, 200mT)	4.2 max.	325W (100kHz)

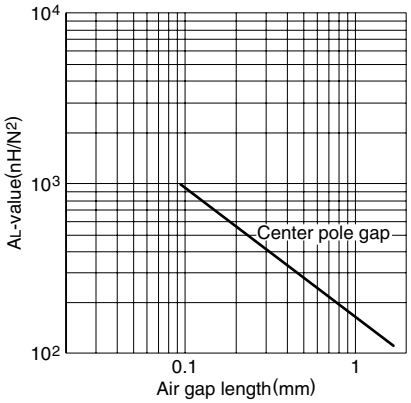
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EER35 gapped core (Typical)



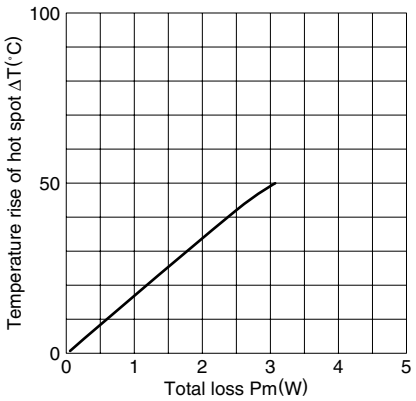
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EER35 core (Typical)

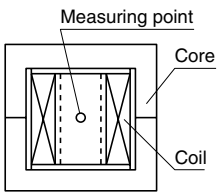


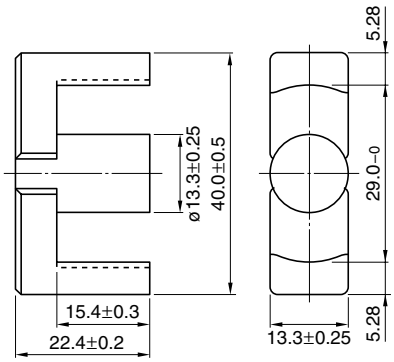
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EER35 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

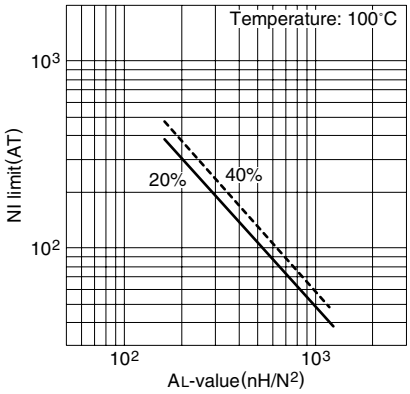
Parameter

Core factor	C_1	mm^{-1}	0.658
Effective magnetic path length	ℓe	mm	98.0
Effective cross-sectional area	Ae	mm^2	149
Effective core volume	Ve	mm^3	14600
Cross-sectional center pole area	Acp	mm^2	139
Minimum cross-sectional center pole area	Acp min.	mm^2	134
Cross-sectional winding area of core	Acw	mm^2	249
Weight (approx.)		g	78

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER40-Z	3620±25% (1kHz, 0.5mA)* 5160 min. (100kHz, 200mT)	6.3 max.	421W (100kHz)

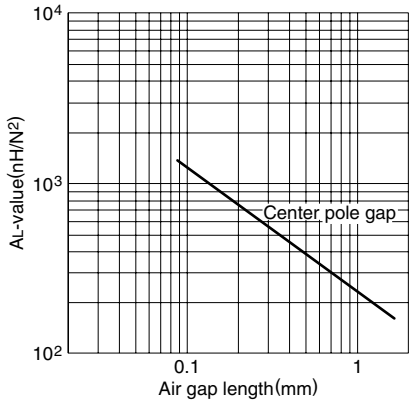
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40EER40 gapped core (Typical)



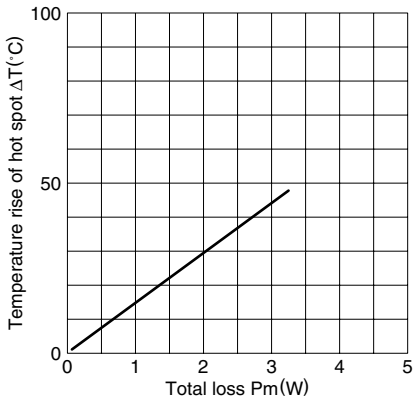
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40EER40 core (Typical)

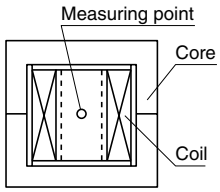


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

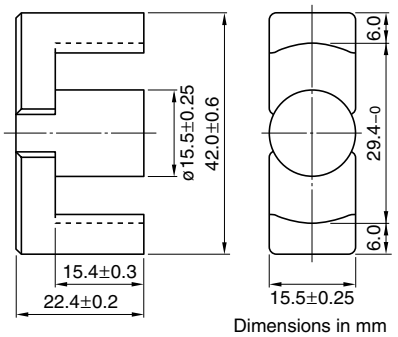
Temperature rise vs. Total loss for EER40 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



EER42 Cores
(JIS FEER 42)



Dimensions in mm

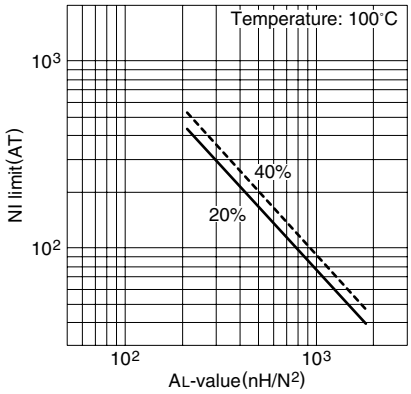
Parameter

Core factor	C_1	mm^{-1}	0.509
Effective magnetic path length	ℓe	mm	98.8
Effective cross-sectional area	Ae	mm^2	194
Effective core volume	Ve	mm^3	19200
Cross-sectional center pole area	Acp	mm^2	187
Minimum cross-sectional center pole area	Acp min.	mm^2	183
Cross-sectional winding area of core	Acw	mm^2	223
Weight (approx.)		g	102

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER42-Z	4690±25% (1kHz, 0.5mA)* 6670 min. (100kHz, 200mT)	8.6 max.	433W (100kHz)

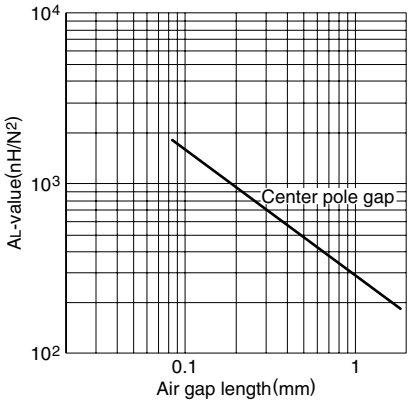
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER42 gapped core (Typical)



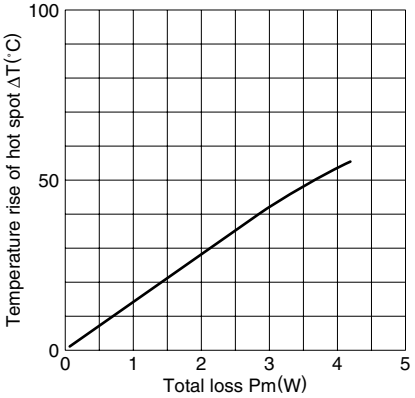
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER42 core (Typical)

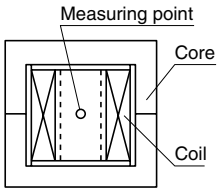


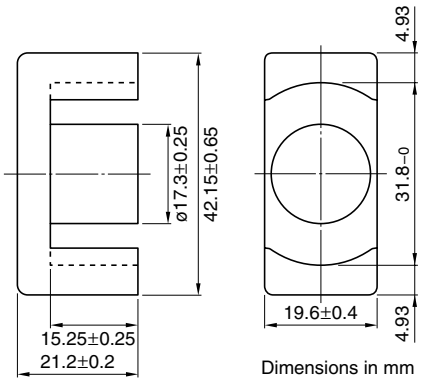
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EER42 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

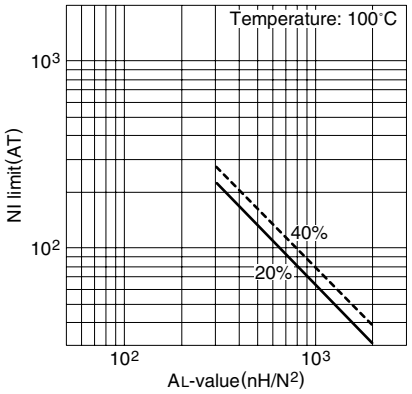
Parameter

Core factor	C_1	mm^{-1}	0.411
Effective magnetic path length	ℓe	mm	98.6
Effective cross-sectional area	Ae	mm^2	240
Effective core volume	Ve	mm^3	23700
Cross-sectional center pole area	Acp	mm^2	235
Minimum cross-sectional center pole area	Acp min.	mm^2	228
Cross-sectional winding area of core	Acw	mm^2	229
Weight (approx.)		g	116

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40EER42/42/20-Z	5340±25% (1kHz, 0.5mA)* 8260 min. (100kHz, 200mT)	10.7 max.	509W (100kHz)

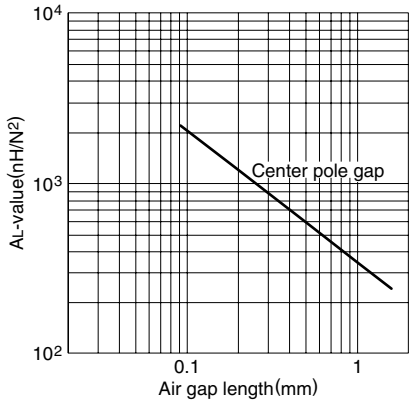
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40EER42/42/20 gapped core (Typical)



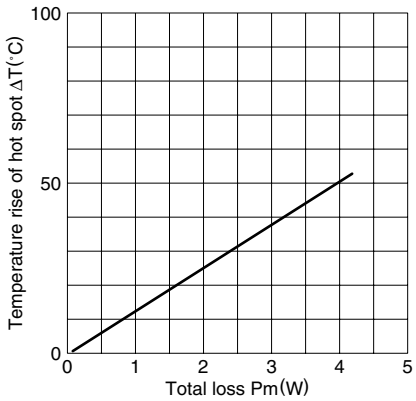
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40EER42/42/20 core (Typical)

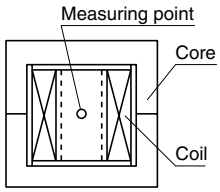


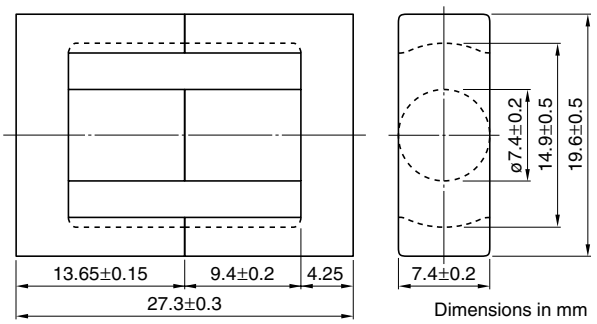
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EER42/42/20core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

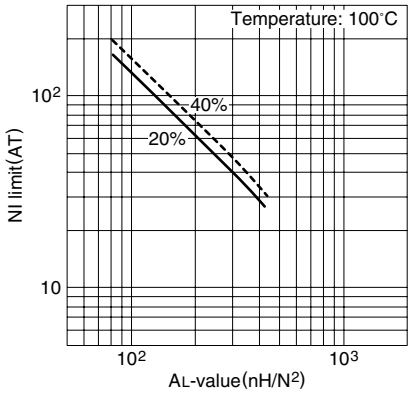
Parameter

Core factor	C_1	mm^{-1}	1.32
Effective magnetic path length	ℓe	mm	54.6
Effective cross-sectional area	Ae	mm^2	41.3
Effective core volume	Ve	mm^3	2260
Cross-sectional center pole area	Acp	mm^2	43
Minimum cross-sectional center pole area	Acp min.	mm^2	40.7
Cross-sectional winding area of core	Acw	mm^2	70.5
Weight (approx.)		g	13.3

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD19-Z	1720±25% (1kHz, 0.5mA)* 2380 min. (100kHz, 200mT)	1.1 max.	79W (100kHz)

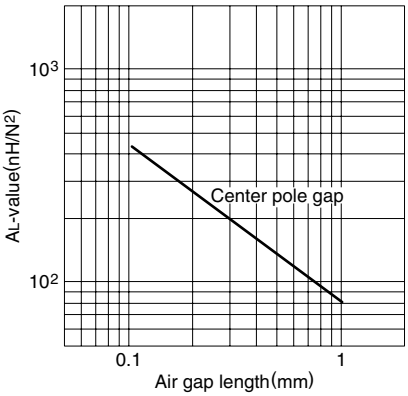
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD19 gapped core (Typical)



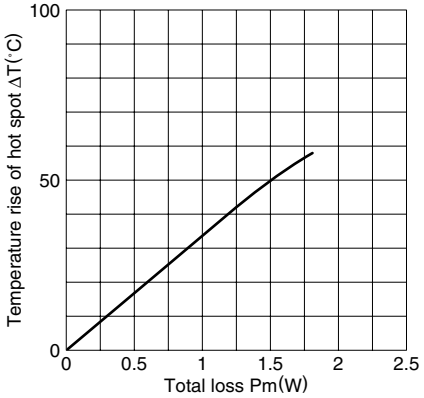
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD19 core (Typical)

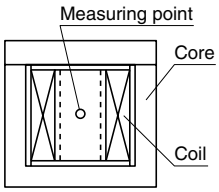


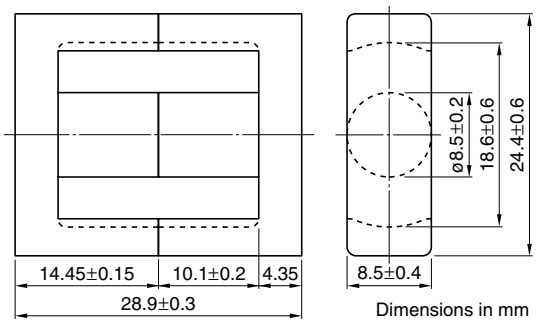
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD19 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

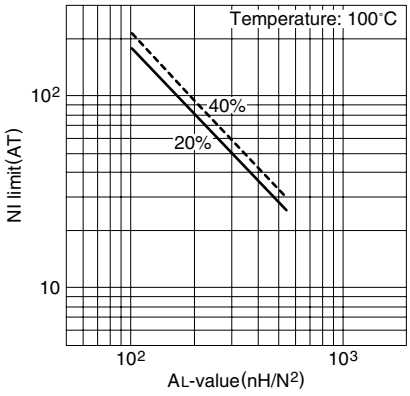
Parameter

Core factor	C_1	mm^{-1}	1.10
Effective magnetic path length	ℓe	mm	61.9
Effective cross-sectional area	Ae	mm^2	56.3
Effective core volume	Ve	mm^3	3480
Cross-sectional center pole area	Acp	mm^2	56.7
Minimum cross-sectional center pole area	Acp min.	mm^2	54.1
Cross-sectional winding area of core	Acw	mm^2	102
Weight (approx.)		g	19.5

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD24-Z	2125±25% (1kHz, 0.5mA)* 2860 min. (100kHz, 200mT)	1.6 max.	115W (100kHz)

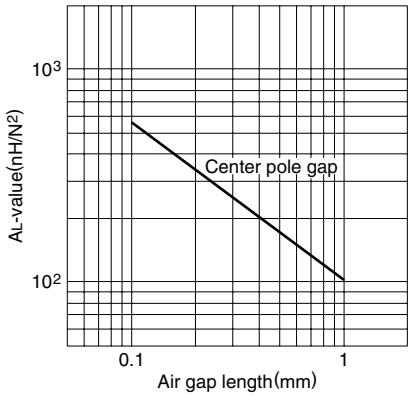
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD24 gapped core (Typical)



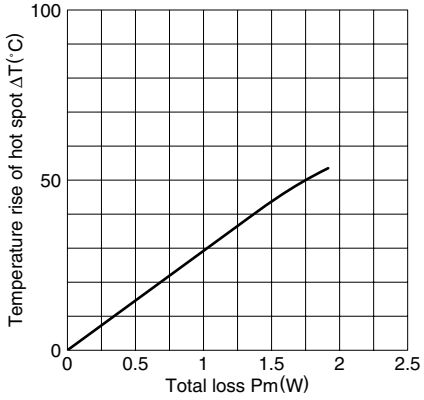
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD24 core (Typical)

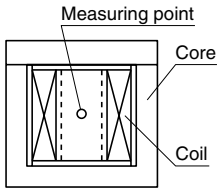


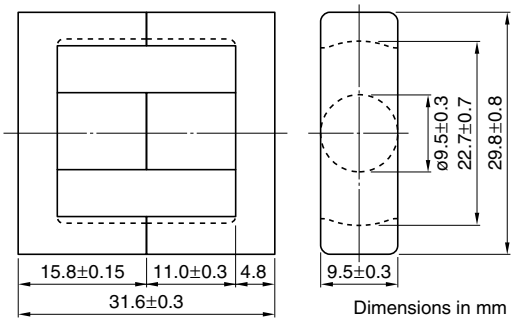
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD24 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

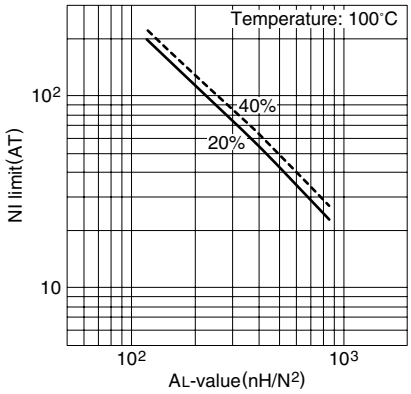
Parameter

Core factor	C_1	mm^{-1}	0.959
Effective magnetic path length	ℓe	mm	70.6
Effective cross-sectional area	Ae	mm^2	73.6
Effective core volume	Ve	mm^3	5170
Cross-sectional center pole area	Acp	mm^2	70.9
Minimum cross-sectional center pole area	Acp min.	mm^2	66.5
Cross-sectional winding area of core	Acw	mm^2	145.2
Weight (approx.)		g	28

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD29-Z	2500±25% (1kHz, 0.5mA)* 3540 min. (100kHz, 200mT)	2.4 max.	170W (100kHz)

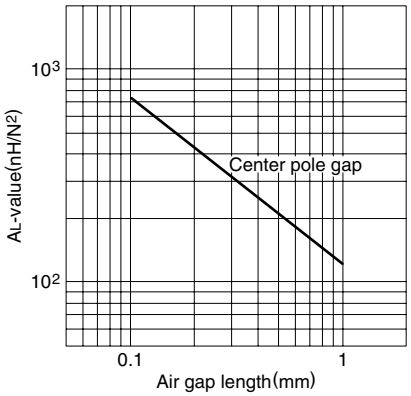
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40ETD29 gapped core (Typical)



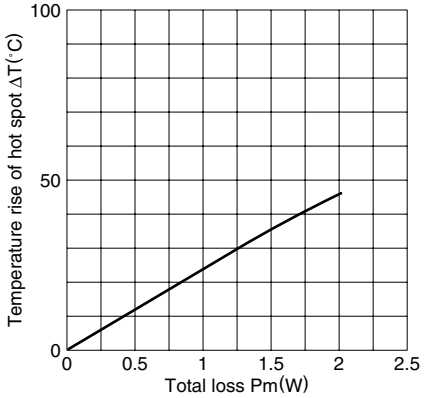
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40ETD29 core (Typical)

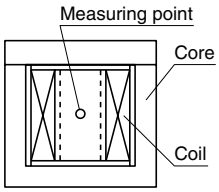


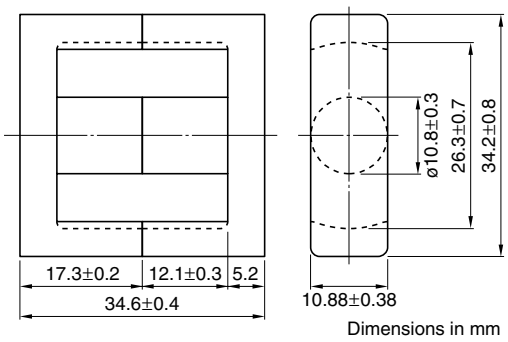
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD29 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

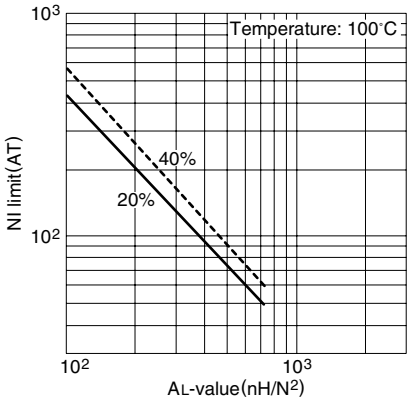
Parameter

Core factor	C_1	mm^{-1}	0.810
Effective magnetic path length	ℓe	mm	78.6
Effective cross-sectional area	Ae	mm^2	97.1
Effective core volume	Ve	mm^3	7630
Cross-sectional center pole area	Acp	mm^2	91.6
Minimum cross-sectional center pole area	Acp min.	mm^2	86.6
Cross-sectional winding area of core	Acw	mm^2	188
Weight (approx.)		g	40

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD34-Z	2780±25% (1kHz, 0.5mA)* 4190 min. (100kHz, 200mT)	3.31 max.	271W (100kHz)

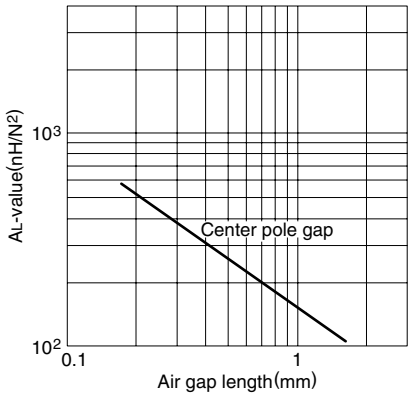
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40ETD34 gapped core (Typical)



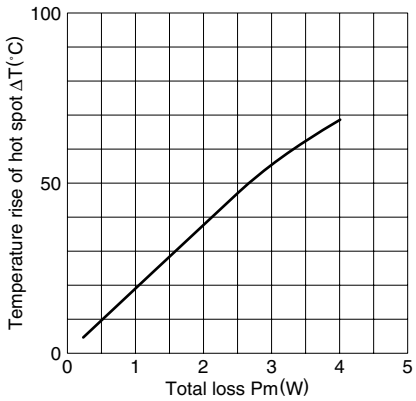
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40ETD34 core (Typical)

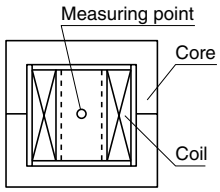


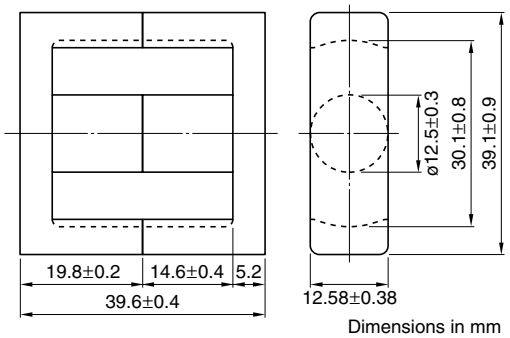
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD34 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

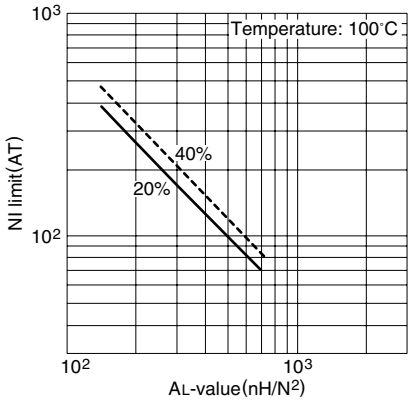
Parameter

Core factor	C_1	mm^{-1}	0.737
Effective magnetic path length	ℓe	mm	92.1
Effective cross-sectional area	Ae	mm^2	125
Effective core volume	Ve	mm^3	11500
Cross-sectional center pole area	Acp	mm^2	123
Minimum cross-sectional center pole area	Acp min.	mm^2	117
Cross-sectional winding area of core	Acw	mm^2	257
Weight (approx.)		g	60

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD39-Z	3150±25% (1kHz, 0.5mA)* 4600 min. (100kHz, 200mT)	5.3 max.	382W (100kHz)

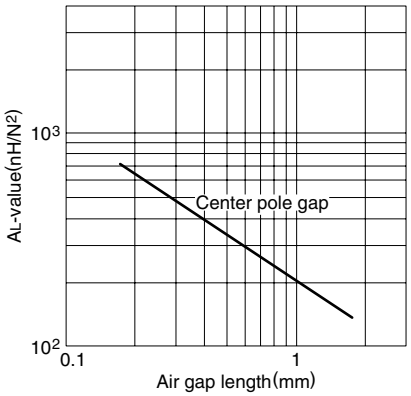
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40ETD39 gapped core (Typical)



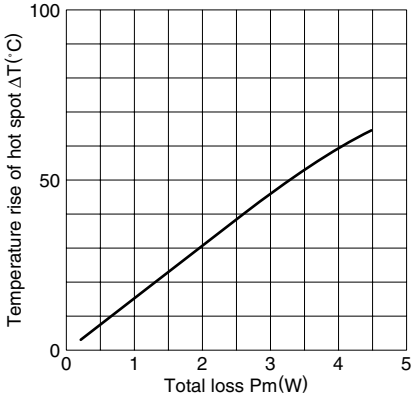
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40ETD39 core (Typical)

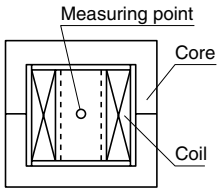


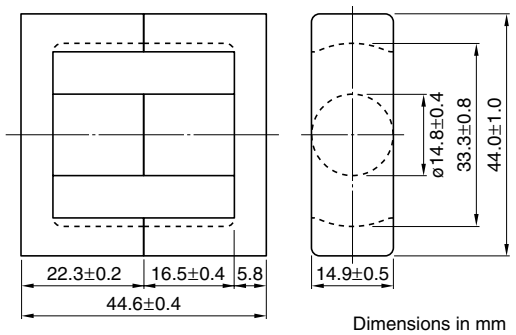
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD39 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

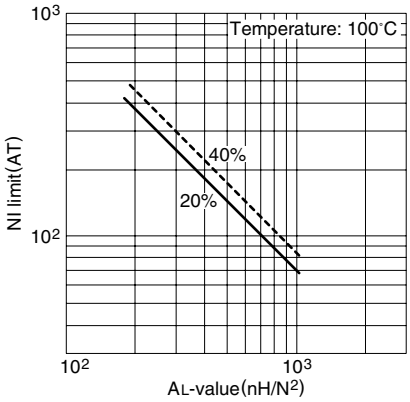
Parameter

Core factor	C_1	mm^{-1}	0.589
Effective magnetic path length	ℓe	mm	103
Effective cross-sectional area	Ae	mm^2	175
Effective core volume	Ve	mm^3	18000
Cross-sectional center pole area	Acp	mm^2	172
Minimum cross-sectional center pole area	Acp min.	mm^2	163
Cross-sectional winding area of core	Acw	mm^2	305
Weight (approx.)		g	94

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD44-Z	4000±25% (1kHz, 0.5mA)* 5760 min. (100kHz, 200mT)	8.3 max.	523W (100kHz)

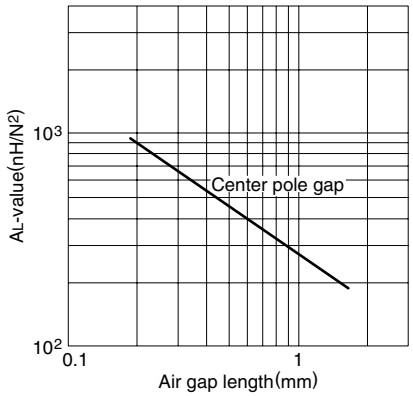
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC40ETD44 gapped core (Typical)



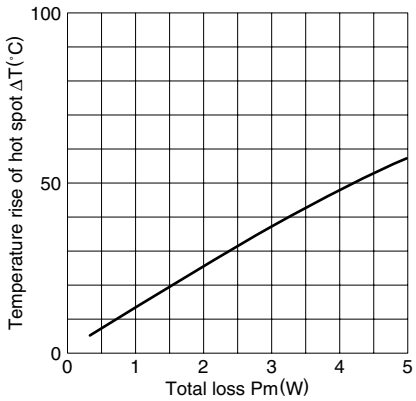
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40ETD44 core (Typical)

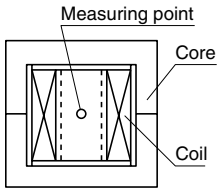


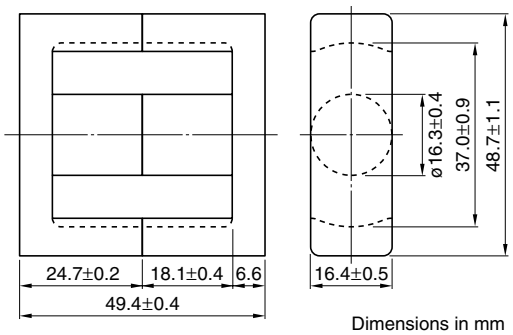
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD44 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

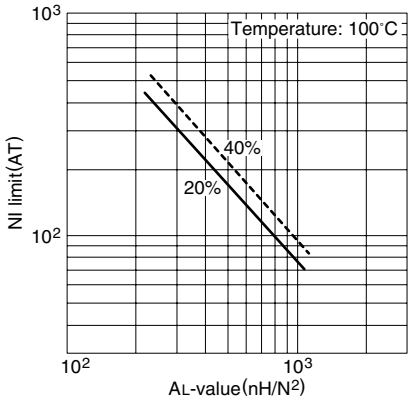
Parameter

Core factor	C_1	mm^{-1}	0.535
Effective magnetic path length	ℓe	mm	114
Effective cross-sectional area	Ae	mm^2	213
Effective core volume	Ve	mm^3	24300
Cross-sectional center pole area	Acp	mm^2	209
Minimum cross-sectional center pole area	Acp min.	mm^2	199
Cross-sectional winding area of core	Acw	mm^2	375
Weight (approx.)		g	124

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40ETD49-Z	4440±25% (1kHz, 0.5mA)* 6340 min. (100kHz, 200mT)	11.2 max.	682W (100kHz)

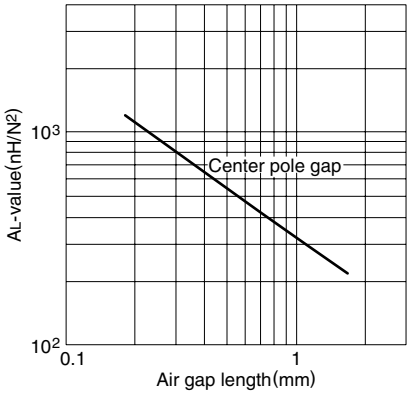
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC40ETD49 gapped core (Typical)



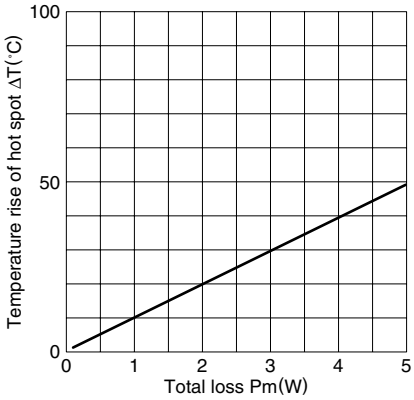
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC40ETD49 core (Typical)

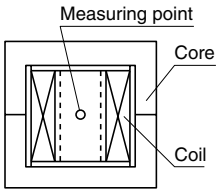


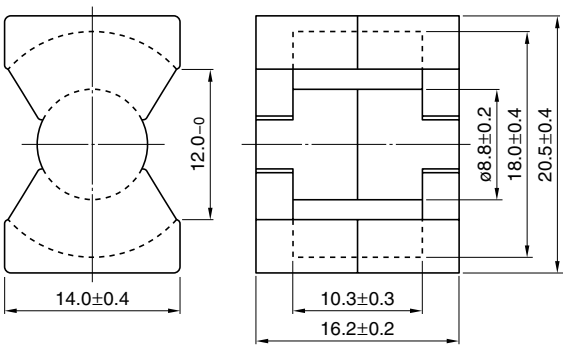
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for ETD49 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

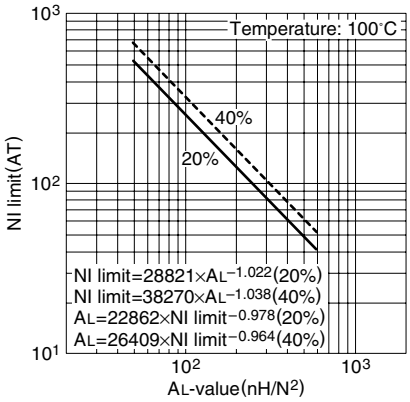
Parameter

Core factor	C_1	mm^{-1}	0.603
Effective magnetic path length	ℓe	mm	37.4
Effective cross-sectional area	Ae	mm^2	62
Effective core volume	Ve	mm^3	2310
Cross-sectional center pole area	Acp	mm^2	60.8
Minimum cross-sectional center pole area	Acp min.	mm^2	58.1
Cross-sectional winding area of core	Acw	mm^2	47.4
Weight (approx.)		g	13

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ20/16Z-12	3880±25% (1kHz, 0.5mA)* 5210 min. (100kHz, 200mT)	0.84 max.	70W (100kHz)

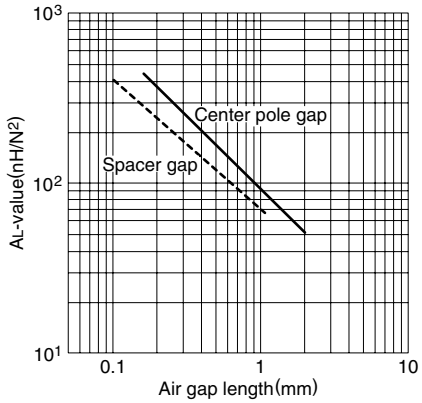
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC44PQ20/16 gapped core (Typical)



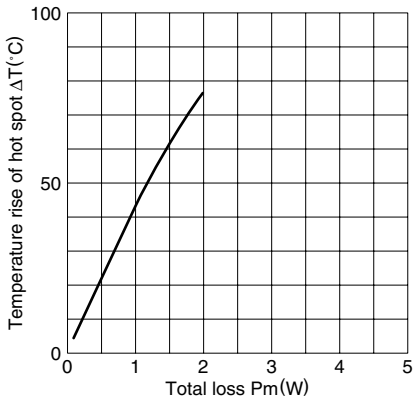
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44PQ20/16 core (Typical)

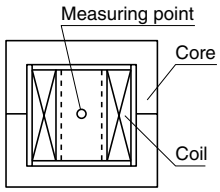


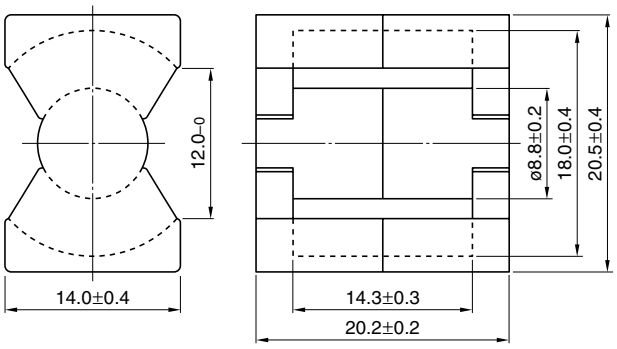
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ20/16 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

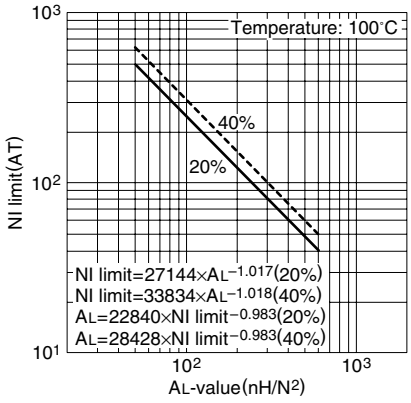
Parameter

Core factor	C_1	mm^{-1}	0.732
Effective magnetic path length	ℓe	mm	45.4
Effective cross-sectional area	Ae	mm^2	62
Effective core volume	Ve	mm^3	2790
Cross-sectional center pole area	Acp	mm^2	60.8
Minimum cross-sectional center pole area	Acp min.	mm^2	58.1
Cross-sectional winding area of core	Acw	mm^2	65.8
Weight (approx.)		g	15

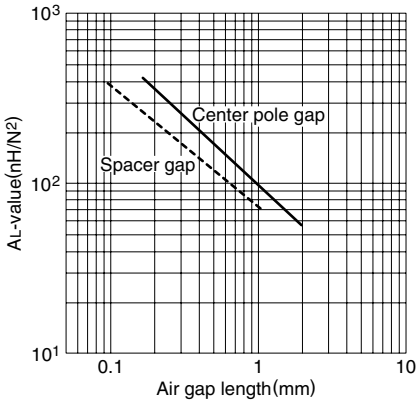
Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44PQ20/20Z-12	3150±25% (1kHz, 0.5mA)* 4290 min. (100kHz, 200mT)	1.02 max.		92W (100kHz)
PC50PQ20/20Z-12	2000±25% (1kHz, 0.5mA)*		0.33 max.	187W (500kHz)

* *Coil: ø0.35 2UEW 100Ts*

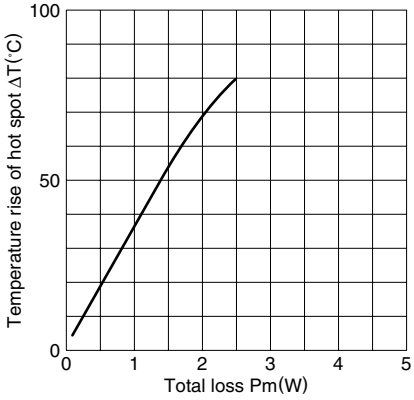
NI limit vs. A_L-value for PC44PQ20/20 gapped core (Typical)



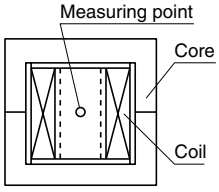
A_L-value vs. Air gap length for PC44PQ20/20 core (Typical)



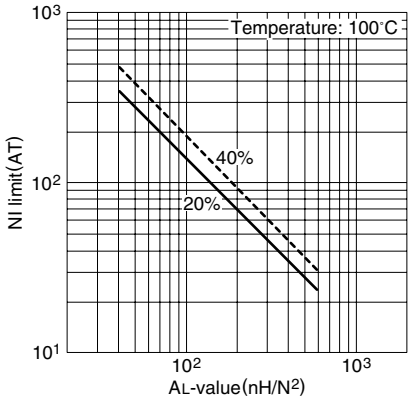
Temperature rise vs. Total loss for PQ20/20 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

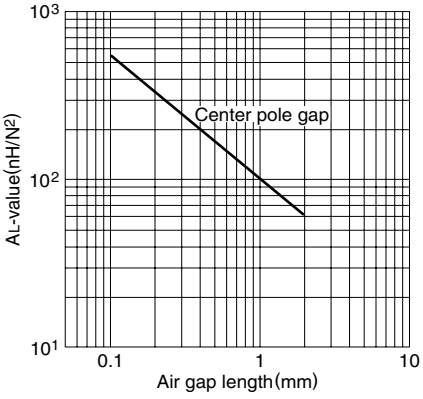


NI limit vs. A_L-value for PC50PQ20/20 gapped core (Typical)

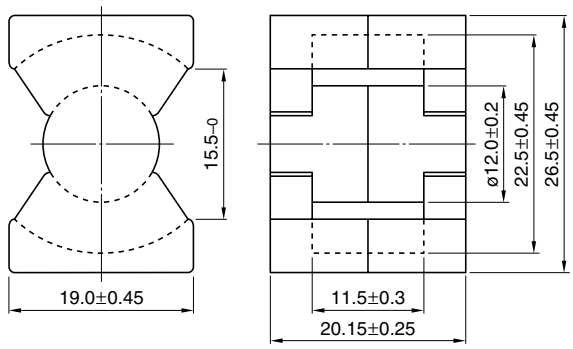


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC50PQ20/20 core (Typical)



Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

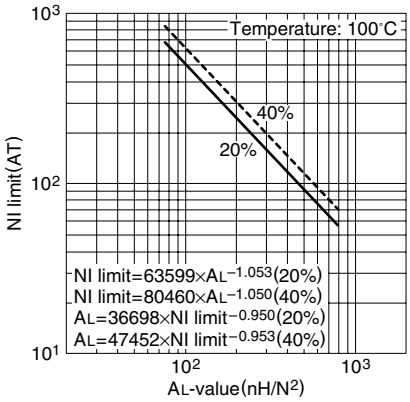
Parameter

Core factor	C_1	mm^{-1}	0.389
Effective magnetic path length	ℓe	mm	46.3
Effective cross-sectional area	Ae	mm^2	119
Effective core volume	Ve	mm^3	5490
Cross-sectional center pole area	Acp	mm^2	113
Minimum cross-sectional center pole area	Acp min.	mm^2	109
Cross-sectional winding area of core	Acw	mm^2	60.4
Weight (approx.)		g	31

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ26/20Z-12	6170±25% (1kHz, 0.5mA)* 8060 min. (100kHz, 200mT)	1.94 max.	170W (100kHz)

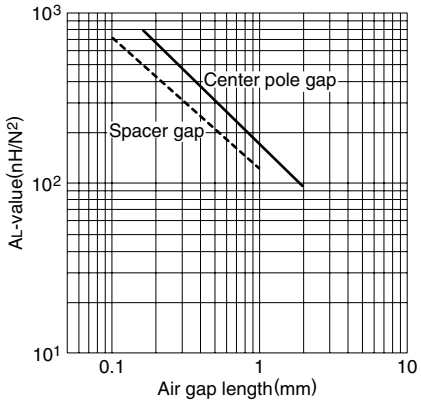
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC44PQ26/20 gapped core (Typical)



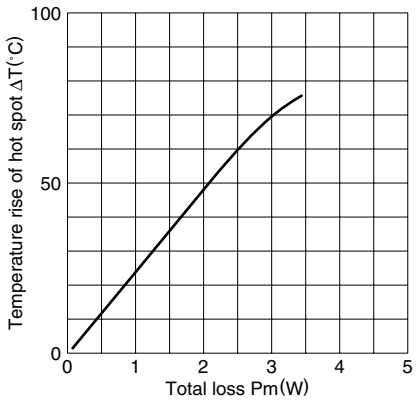
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44PQ26/20 core (Typical)

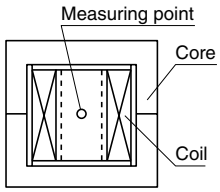


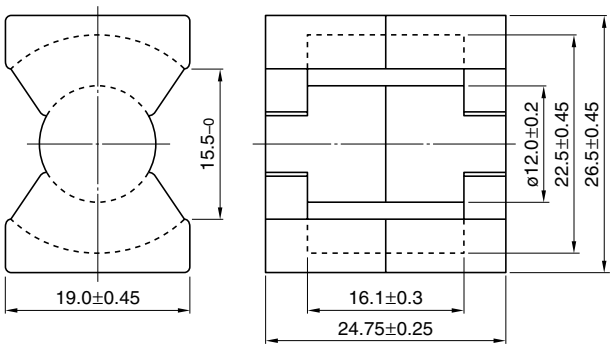
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ26/20 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

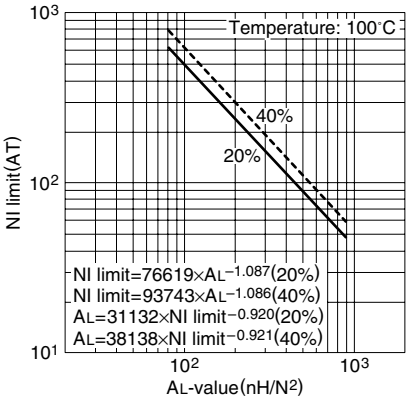
Parameter

Core factor	C_1	mm^{-1}	0.470
Effective magnetic path length	ℓe	mm	55.5
Effective cross-sectional area	Ae	mm^2	118
Effective core volume	Ve	mm^3	6530
Cross-sectional center pole area	Acp	mm^2	113
Minimum cross-sectional center pole area	Acp min.	mm^2	109
Cross-sectional winding area of core	Acw	mm^2	84.5
Weight (approx.)		g	36

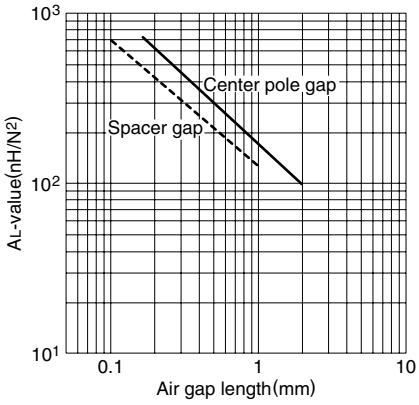
Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44PQ26/25Z-12	5250±25% (1kHz, 0.5mA)* 6680 min. (100kHz, 200mT)	2.32 max.		195W (100kHz)
PC50PQ26/25Z-12	3200±25% (1kHz, 0.5mA)*		0.76 max.	366W (500kHz)

* *Coil: ø0.35 2UEW 100Ts*

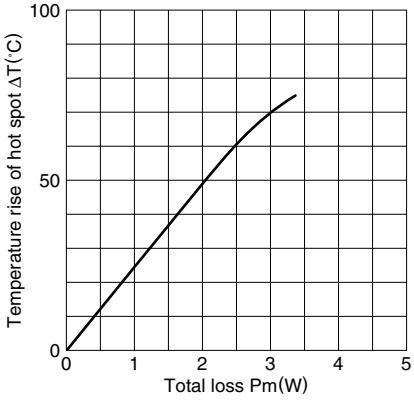
NI limit vs. A_L-value for PC44PQ26/25 gapped core (Typical)



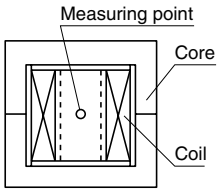
A_L-value vs. Air gap length for PC44PQ26/25 core (Typical)



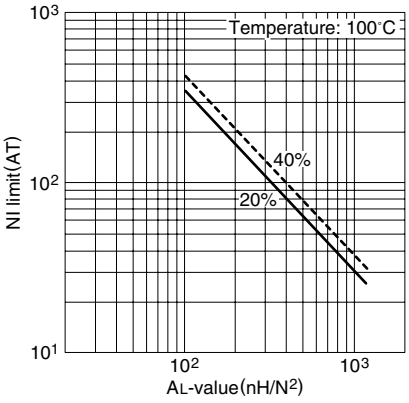
Temperature rise vs. Total loss for PQ26/25 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

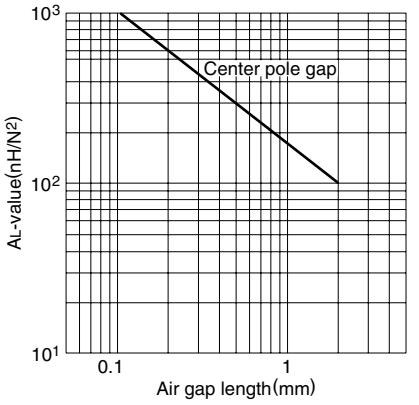


NI limit vs. A_L-value for PC50PQ26/25 gapped core (Typical)

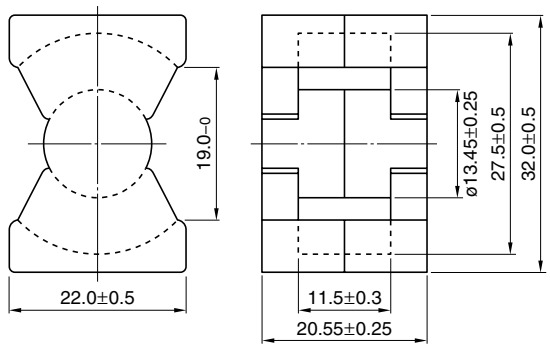


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC50PQ26/25 core (Typical)



Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

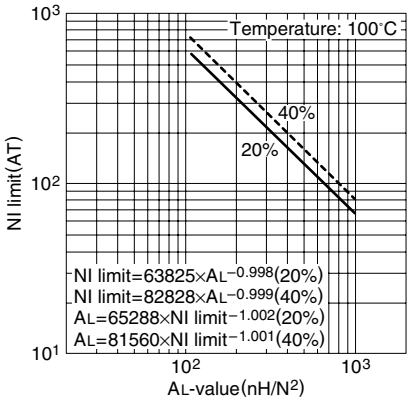
Parameter

Core factor	C_1	mm^{-1}	0.326
Effective magnetic path length	ℓe	mm	55.5
Effective cross-sectional area	Ae	mm^2	170
Effective core volume	Ve	mm^3	9420
Cross-sectional center pole area	Acp	mm^2	142
Minimum cross-sectional center pole area	Acp min.	mm^2	137
Cross-sectional winding area of core	Acw	mm^2	80.8
Weight (approx.)		g	42

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ32/20Z-12	7310±25% (1kHz, 0.5mA)* 9640 min. (100kHz, 200mT)	2.92 max.	232W (100kHz)

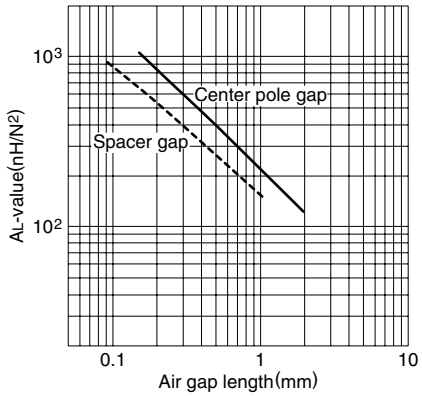
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC44PQ32/20 gapped core (Typical)



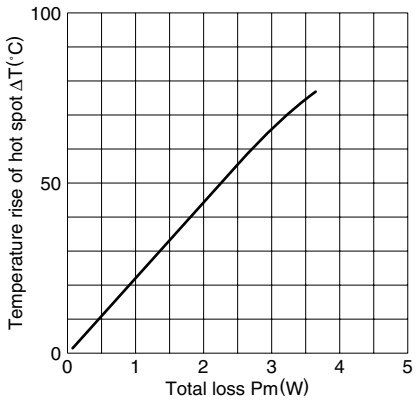
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ32/20 core (Typical)

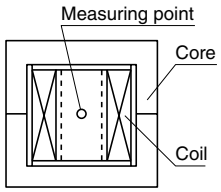


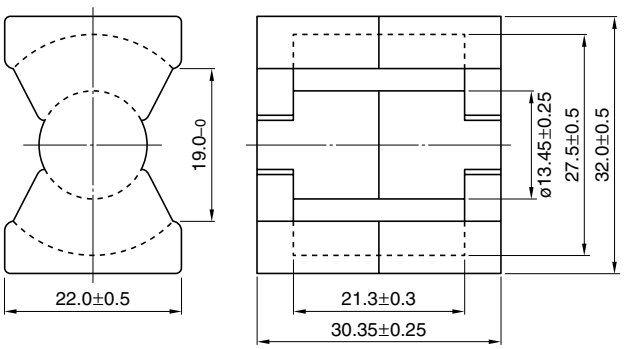
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ32/20 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

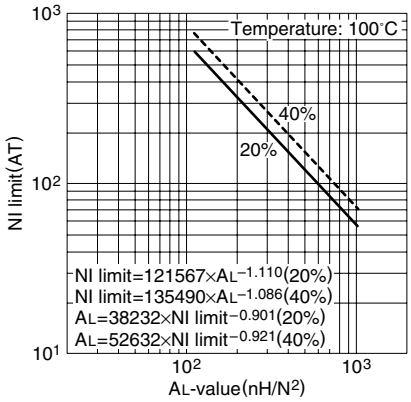
Parameter

Core factor	C_1	mm^{-1}	0.463
Effective magnetic path length	ℓe	mm	74.6
Effective cross-sectional area	Ae	mm^2	161
Effective core volume	Ve	mm^3	11970
Cross-sectional center pole area	Acp	mm^2	142
Minimum cross-sectional center pole area	Acp min.	mm^2	137
Cross-sectional winding area of core	Acw	mm^2	149.6
Weight (approx.)		g	55

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ32/30Z-12	5140±25% (1kHz, 0.5mA)* 6790 min. (100kHz, 200mT)	3.92 max.	331W (100kHz)

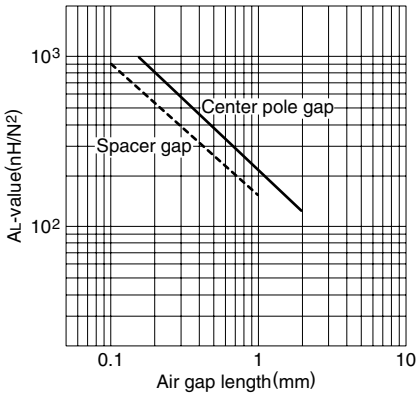
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC44PQ32/30 gapped core (Typical)



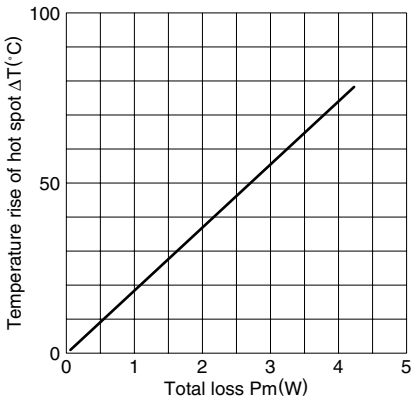
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44PQ32/30 core (Typical)

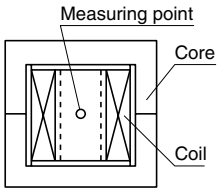


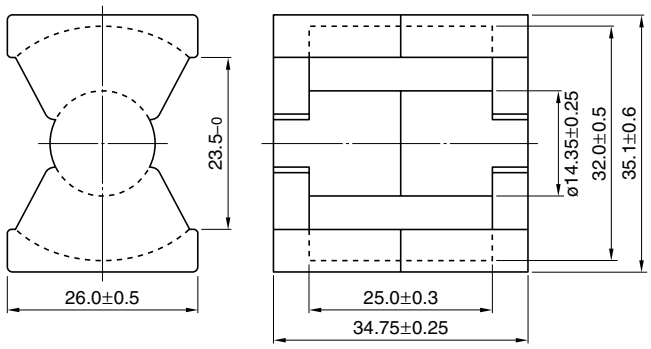
Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ32/30 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

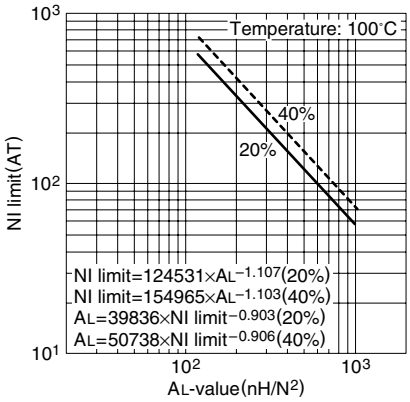
Parameter

Core factor	C_1	mm^{-1}	0.448
Effective magnetic path length	ℓe	mm	87.9
Effective cross-sectional area	Ae	mm^2	196
Effective core volume	Ve	mm^3	17200
Cross-sectional center pole area	Acp	mm^2	162
Minimum cross-sectional center pole area	Acp min.	mm^2	156
Cross-sectional winding area of core	Acw	mm^2	220.6
Weight (approx.)		g	73

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ35/35Z-12	4860±25% (1kHz, 0.5mA)* 7010 min. (100kHz, 200mT)	5.27 max.	452W (100kHz)

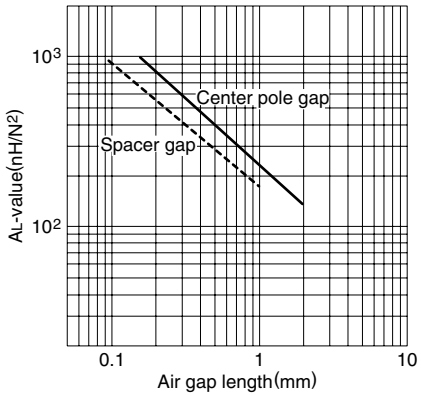
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC44PQ35/35 gapped core (Typical)



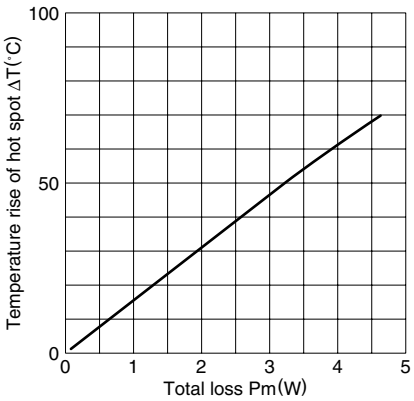
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44PQ35/35 core (Typical)

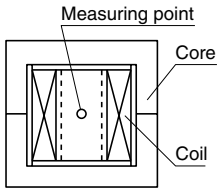


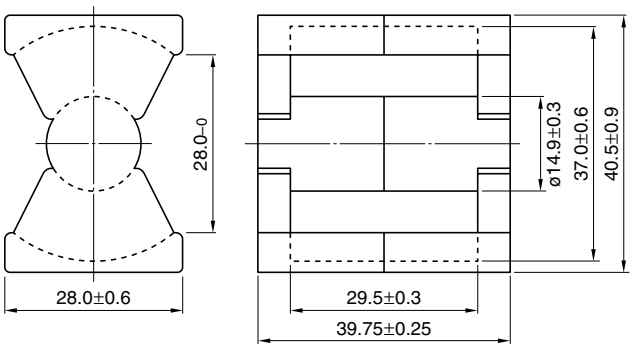
Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ35/35 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

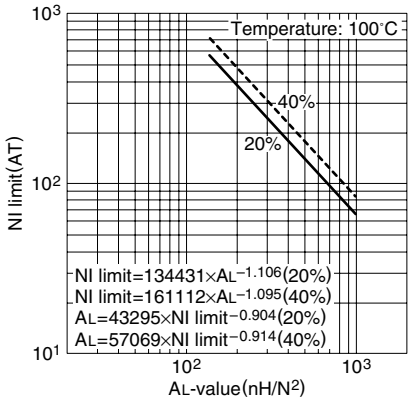
Parameter

Core factor	C_1	mm^{-1}	0.507
Effective magnetic path length	ℓe	mm	102
Effective cross-sectional area	Ae	mm^2	201
Effective core volume	Ve	mm^3	20500
Cross-sectional center pole area	Acp	mm^2	174
Minimum cross-sectional center pole area	Acp min.	mm^2	167
Cross-sectional winding area of core	Acw	mm^2	326
Weight (approx.)		g	95

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ40/40Z-12	4300±25% (1kHz, 0.5mA)* 6200 min. (100kHz, 200mT)	6.56 max.	596W (100kHz)

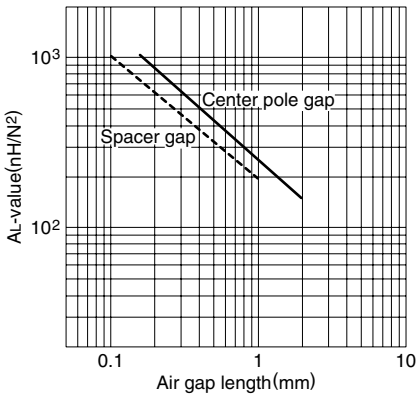
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC44PQ40/40 gapped core (Typical)



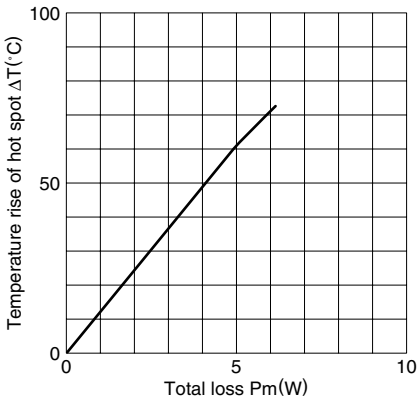
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44PQ40/40 core (Typical)

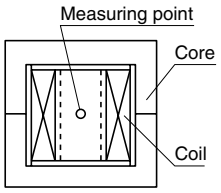


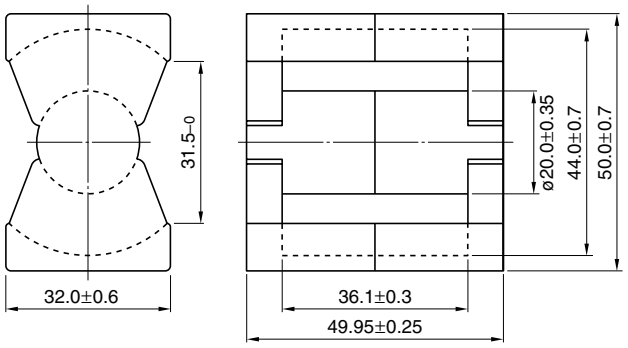
Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ40/40 core (Typical)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

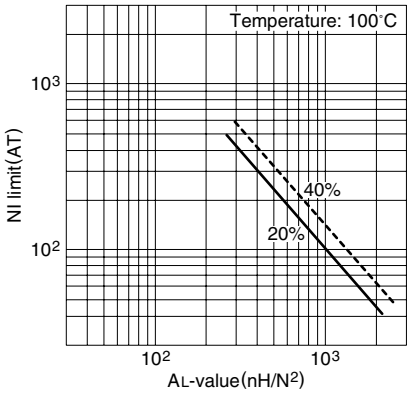
Parameter

Core factor	C_1	mm^{-1}	0.346
Effective magnetic path length	ℓe	mm	113
Effective cross-sectional area	Ae	mm^2	328
Effective core volume	Ve	mm^3	37238
Cross-sectional center pole area	Acp	mm^2	314
Minimum cross-sectional center pole area	Acp min.	mm^2	303
Cross-sectional winding area of core	Acw	mm^2	433
Weight (approx.)		g	195

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 150mT	Calculated output power (forward converter mode)
PC44PQ50/50Z-12	6720±25% (1kHz, 0.5mA)* 9810 min. (100kHz, 150mT)	6.1 max.	1045W (100kHz)

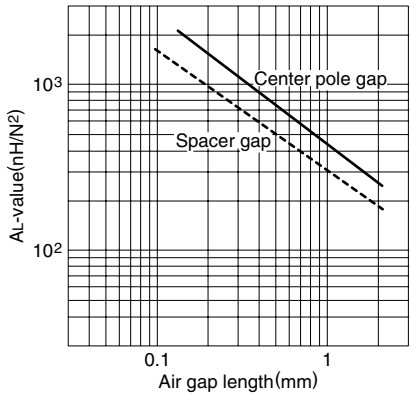
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC44PQ50/50 gapped core (Typical)



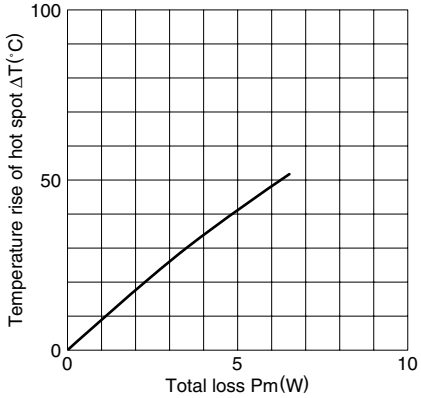
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44PQ50/50 core (Typical)

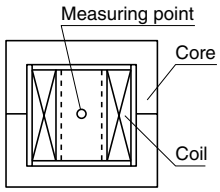


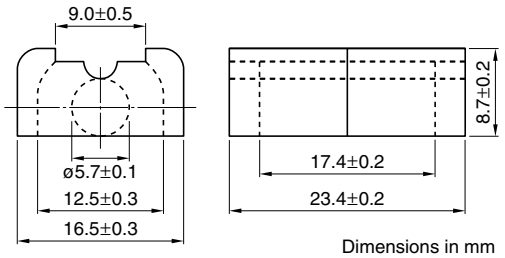
Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ50/50 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

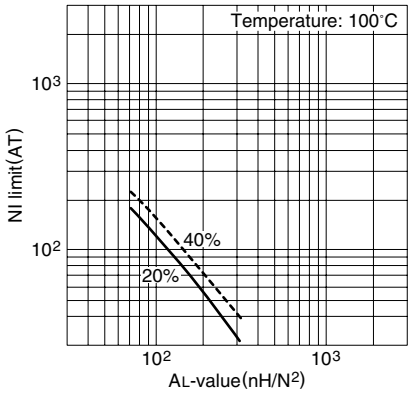
Parameter

Core factor	C_1	mm^{-1}	1.41
Effective magnetic path length	ℓe	mm	44.1
Effective cross-sectional area	Ae	mm^2	31.3
Effective core volume	Ve	mm^3	1380
Cross-sectional center pole area	Acp	mm^2	25.5
Minimum cross-sectional center pole area	Acp min.	mm^2	24.6
Cross-sectional winding area of core	Acw	mm^2	59.2
Weight (approx.)		g	9.6

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44LP23/8Z-12	1600±25% (1kHz, 0.5mA)* 2230 min. (100kHz, 200mT)	0.42 max.	50W (100kHz)

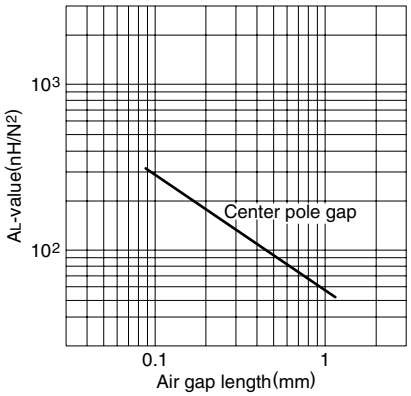
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC44LP23/8 gapped core (Typical)



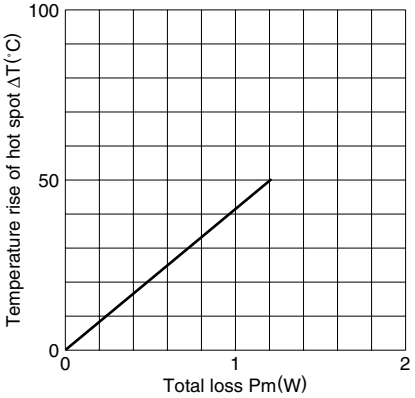
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

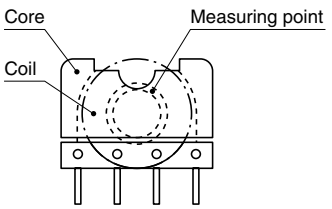
AL-value vs. Air gap length for PC44LP23/8 core (Typical)



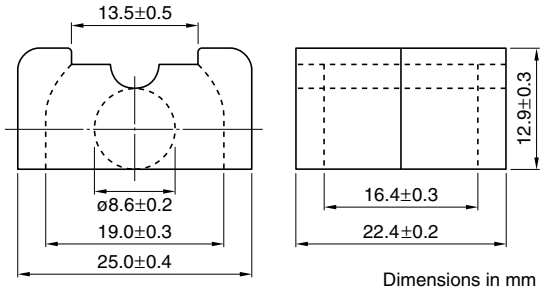
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for LP23/8 core (Typical) (Ambient temperature: 25°C)





Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



Dimensions in mm

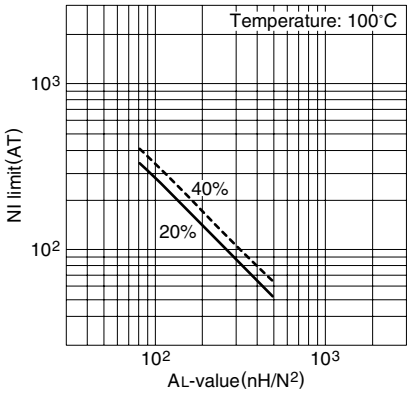
Parameter

Core factor	C_1	mm^{-1}	0.721
Effective magnetic path length	ℓe	mm	49.0
Effective cross-sectional area	Ae	mm^2	67.9
Effective core volume	Ve	mm^3	3330
Cross-sectional center pole area	Acp	mm^2	58.1
Minimum cross-sectional center pole area	Acp min.	mm^2	55.4
Cross-sectional winding area of core	Acw	mm^2	84.2
Weight (approx.)		g	21

Part No.	AL-value (nH/N2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44LP22/13Z-12	3310±25% (1kHz, 0.5mA)* 4700 min. (100kHz, 200mT)	1.05 max.	121W (100kHz)

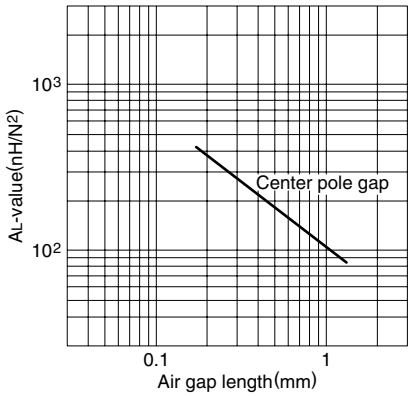
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. AL-value for PC44LP22/13 gapped core (Typical)



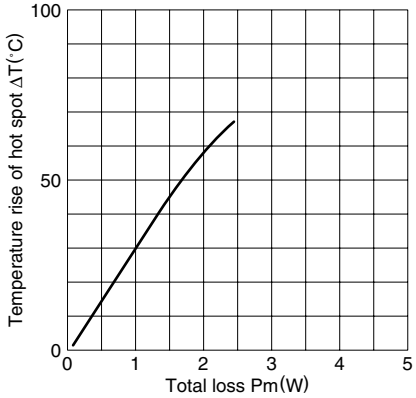
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

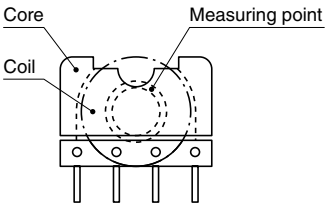
AL-value vs. Air gap length for PC44LP22/13 core (Typical)



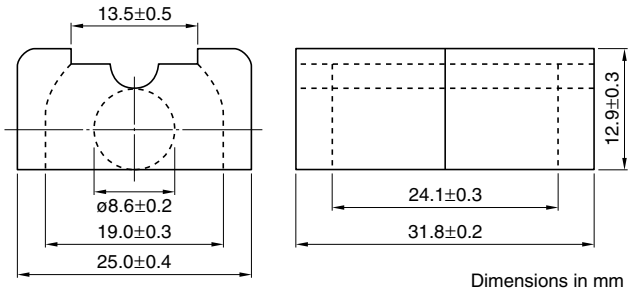
Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for LP22/13 core (Typical) (Ambient temperature: 25°C)





Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



Dimensions in mm

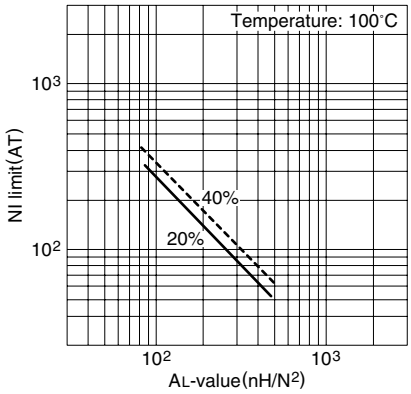
Parameter

Core factor	C_1	mm^{-1}	0.909
Effective magnetic path length	ℓe	mm	64.0
Effective cross-sectional area	Ae	mm^2	70.3
Effective core volume	Ve	mm^3	4500
Cross-sectional center pole area	Acp	mm^2	58.1
Minimum cross-sectional center pole area	Acp min.	mm^2	55.4
Cross-sectional winding area of core	Acw	mm^2	125.3
Weight (approx.)		g	30

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44LP32/13Z-12	2630±25% (1kHz, 0.5mA)* 3730 min. (100kHz, 200mT)	1.38 max.	164W (100kHz)

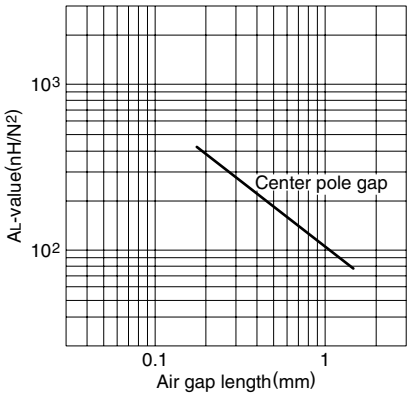
* *Coil: ø0.35 2UEW 100Ts*

NI limit vs. A_L-value for PC44LP32/13 gapped core (Typical)



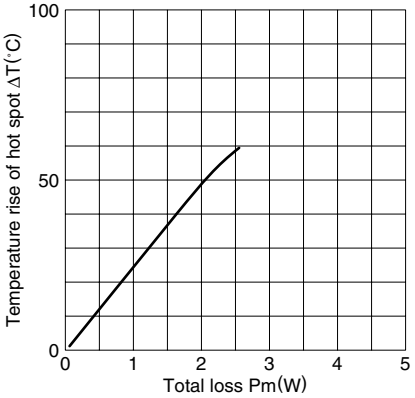
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

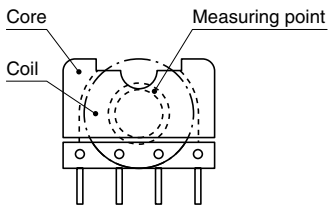
A_L-value vs. Air gap length for PC44LP32/13core (Typical)



Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

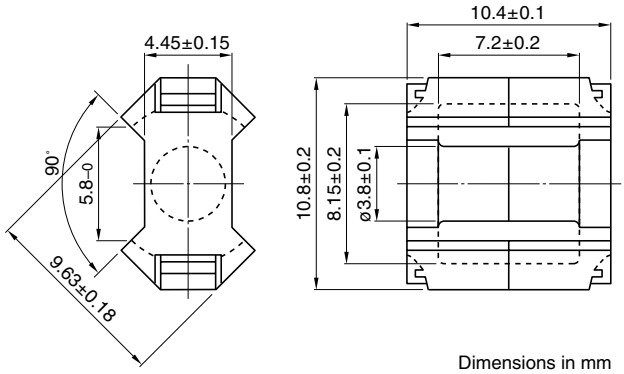
Temperature rise vs. Total loss for LP32/13 core (Typical) (Ambient temperature: 25°C)





Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

Based on JIS C 2516, IEC publication 431 and DIN 41980.



Dimensions in mm

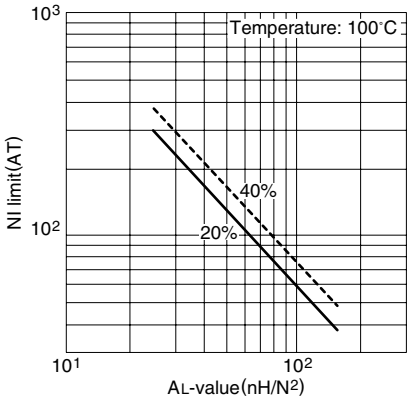
Parameter

Core factor	C_1	mm^{-1}	1.62
Effective magnetic path length	ℓe	mm	22.7
Effective cross-sectional area	Ae	mm^2	14.0
Effective core volume	Ve	mm^3	318
Cross-sectional center pole area	Acp	mm^2	11.3
Minimum cross-sectional center pole area	Acp min.	mm^2	10.7
Cross-sectional winding area of core	Acw	mm^2	15.6
Weight (approx.)		g	1.7

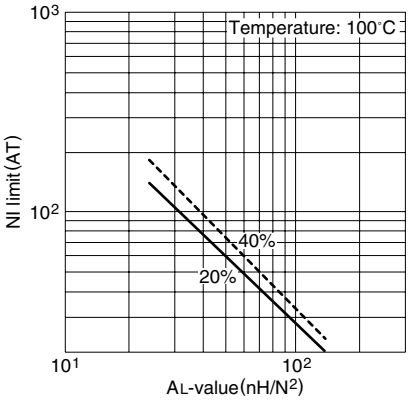
Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC40RM4Z-12	680 min. (1kHz, 0.5mA)* 1650 min. (100kHz, 200mT)	0.12 max.		6.9W (100kHz)
PC50RM4Z-12	960±25% (1kHz, 0.5mA)*		0.036 max.	21W (500kHz)

* *Coil: ø0.18 2UEW 100Ts*

NI limit vs. A_L-value for PC40RM4 gapped core (Typical)

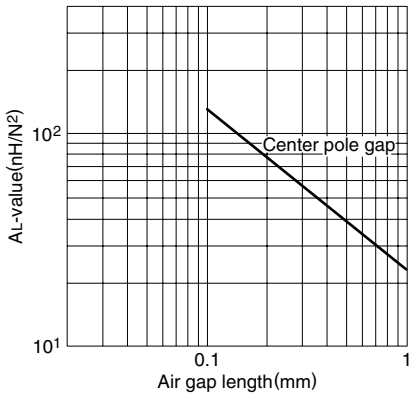


NI limit vs. A_L-value for PC50RM4 gapped core (Typical)

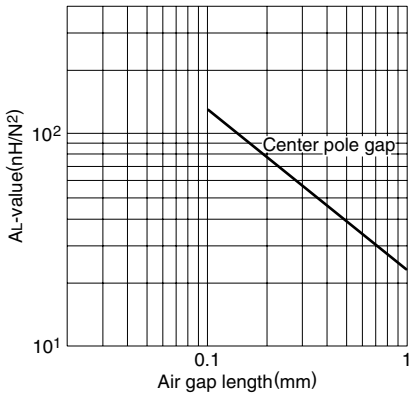


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40RM4 core (Typical)

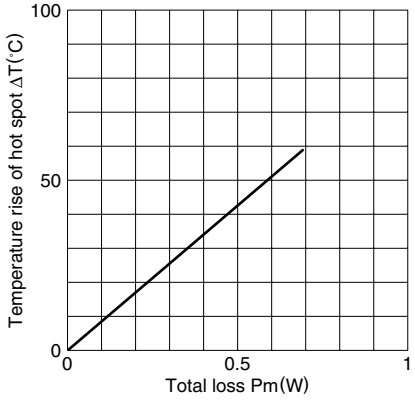


A_L-value vs. Air gap length for PC50RM4 core (Typical)

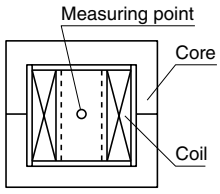


Measuring conditions • Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

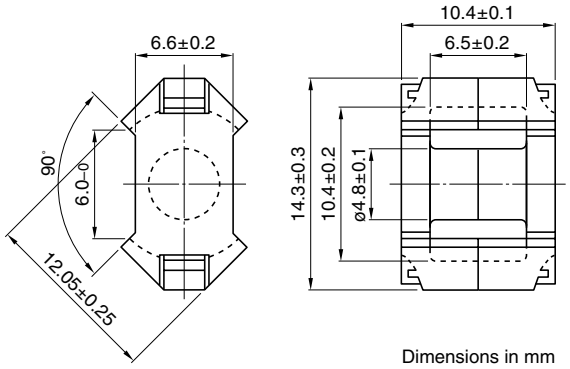
Temperature rise vs. Total loss for RM4 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



Based on JIS C 2516, IEC publication 431 and DIN 41980.



Dimensions in mm

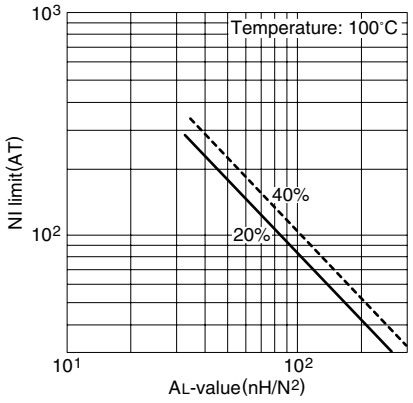
Parameter

Core factor	C_1	mm^{-1}	0.940
Effective magnetic path length	ℓe	mm	22.4
Effective cross-sectional area	Ae	mm^2	23.7
Effective core volume	Ve	mm^3	530
Cross-sectional center pole area	Acp	mm^2	18.1
Minimum cross-sectional center pole area	Acp min.	mm^2	17.3
Cross-sectional winding area of core	Acw	mm^2	18.2
Weight (approx.)		g	3.0

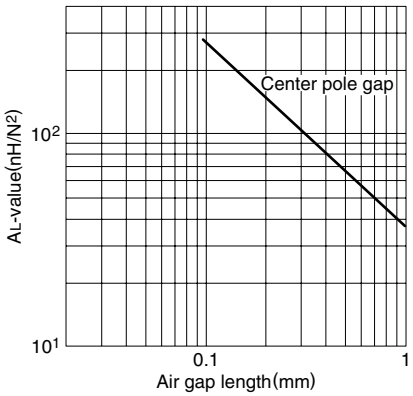
Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC40RM5Z-12	1250 min. (1kHz, 0.5mA)* 3340 min. (100kHz, 200mT)	0.18 max.		16W (100kHz)
PC50RM5Z-12	1340±25% (1kHz, 0.5mA)*		0.053 max.	34W (500kHz)

* *Coil: ø0.2 2UEW 100Ts*

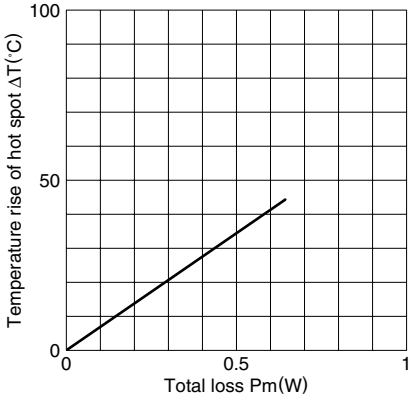
NI limit vs. A_L-value for PC40RM5 gapped core (Typical)



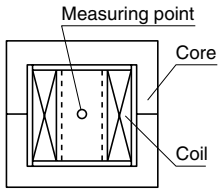
A_L-value vs. Air gap length for PC40RM5 core (Typical)



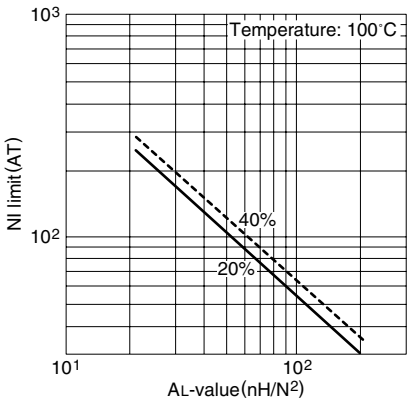
Temperature rise vs. Total loss for RM5 core (Typical) (Ambient temperature: 25°C)



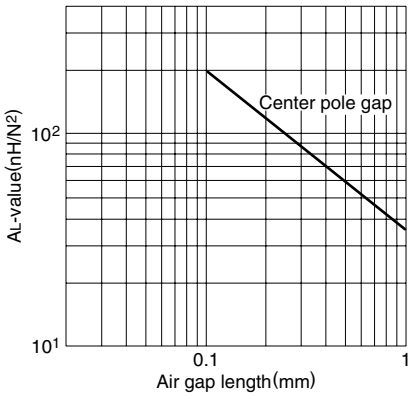
Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



NI limit vs. A_L-value for PC50RM5 gapped core (Typical)



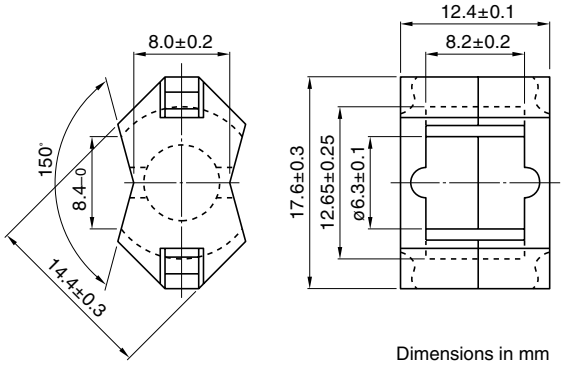
A_L-value vs. Air gap length for PC50RM5 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Based on JIS C 2516, IEC publication 431 and DIN 41980.



Dimensions in mm

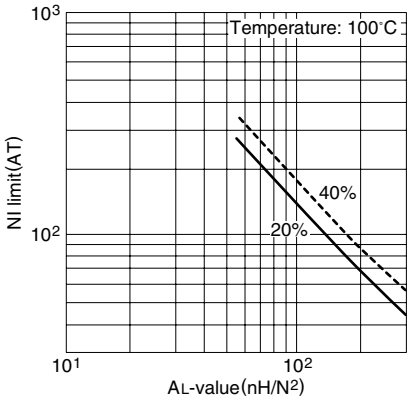
Parameter

Core factor	C_1	mm^{-1}	0.781
Effective magnetic path length	ℓe	mm	28.6
Effective cross-sectional area	Ae	mm^2	36.6
Effective core volume	Ve	mm^3	1050
Cross-sectional center pole area	Acp	mm^2	31.2
Minimum cross-sectional center pole area	Acp min.	mm^2	30.2
Cross-sectional winding area of core	Acw	mm^2	26.0
Weight (approx.)		g	5.5

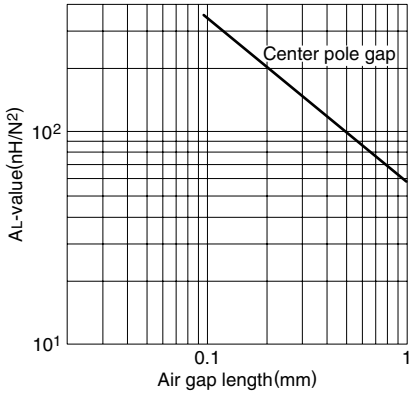
Part No.	AL-value (nH/N2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC40RM6Z-12	1830 min. (1kHz, 0.5mA)* 4030 min. (100kHz, 200mT)	0.41 max.		27W (100kHz)
PC50RM6Z-12	1700±25% (1kHz, 0.5mA)*		0.11 max.	55W (500kHz)

* *Coil: ø0.26 2UEW 100Ts*

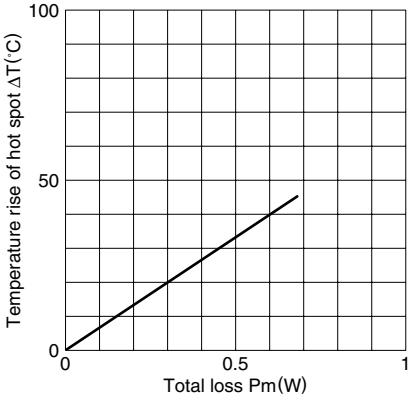
NI limit vs. AL-value for PC40RM6 gapped core (Typical)



AL-value vs. Air gap length for PC40RM6 core (Typical)

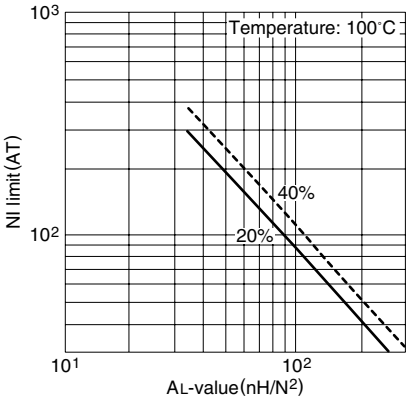


Temperature rise vs. Total loss for RM6 core (Typical) (Ambient temperature: 25°C)

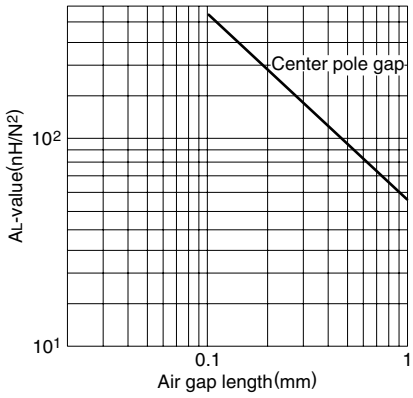


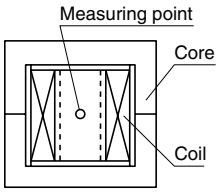
Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

NI limit vs. AL-value for PC50RM6 gapped core (Typical)



AL-value vs. Air gap length for PC50RM6 core (Typical)

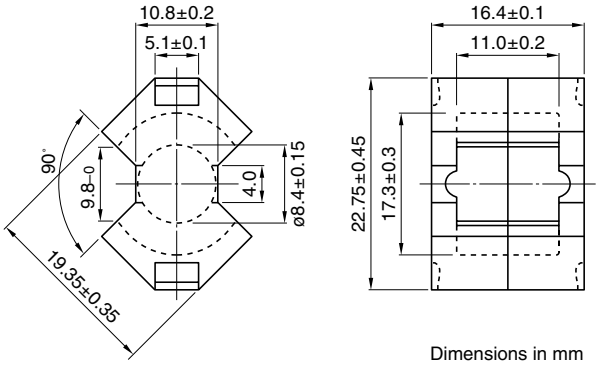




Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ø0.26 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Based on JIS C 2516, IEC publication 431 and DIN 41980.



Dimensions in mm

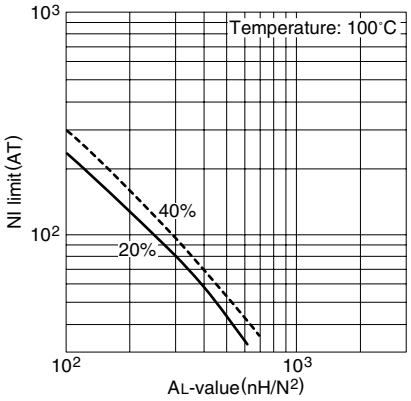
Parameter

Core factor	C_1	mm^{-1}	0.594
Effective magnetic path length	ℓe	mm	38
Effective cross-sectional area	Ae	mm^2	64
Effective core volume	Ve	mm^3	2430
Cross-sectional center pole area	Acp	mm^2	55.4
Minimum cross-sectional center pole area	Acp min.	mm^2	53.5
Cross-sectional winding area of core	Acw	mm^2	48.9
Weight (approx.)		g	13

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40RM8Z-12	1950 min. (1kHz, 0.5mA)* 5290 min. (100kHz, 200mT)	0.97 max.	67W (100kHz)

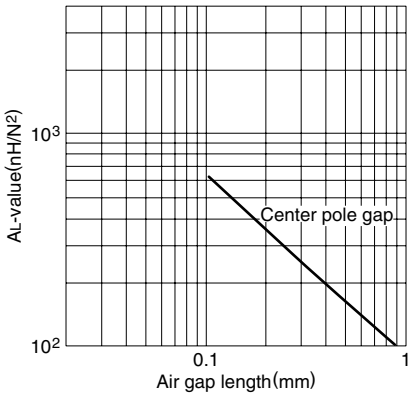
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC40RM8 gapped core (Typical)



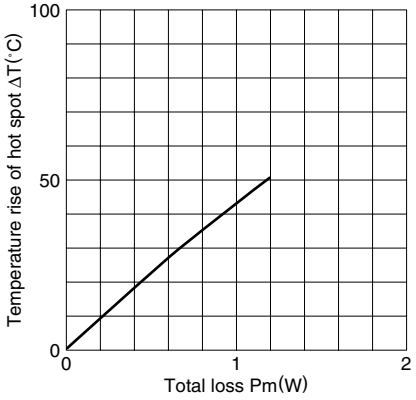
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40RM8 core (Typical)

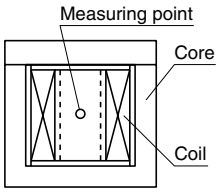


Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

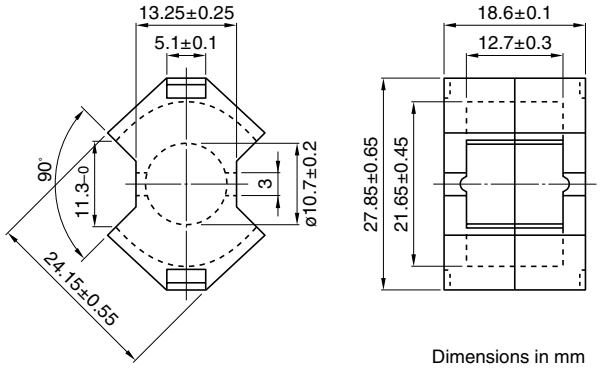
Temperature rise vs. Total loss for RM8 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



Based on JIS C 2516, IEC publication 431 and DIN 41980.



Dimensions in mm

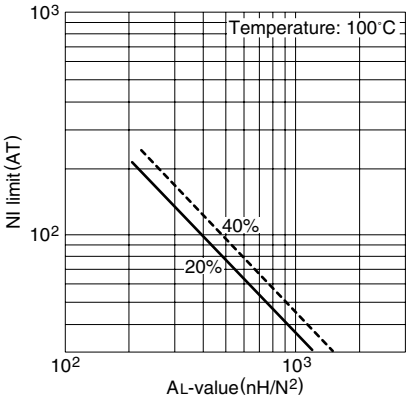
Parameter

Core factor	C_1	mm^{-1}	0.450
Effective magnetic path length	ℓe	mm	44.0
Effective cross-sectional area	Ae	mm^2	98.0
Effective core volume	Ve	mm^3	4310
Cross-sectional center pole area	Acp	mm^2	89.9
Minimum cross-sectional center pole area	Acp min.	mm^2	86.6
Cross-sectional winding area of core	Acw	mm^2	69.5
Weight (approx.)		g	23

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40RM10Z-12	3630 min. (1kHz, 0.5mA)* 7000 min. (100kHz, 200mT)	1.8 max.	130W (100kHz)

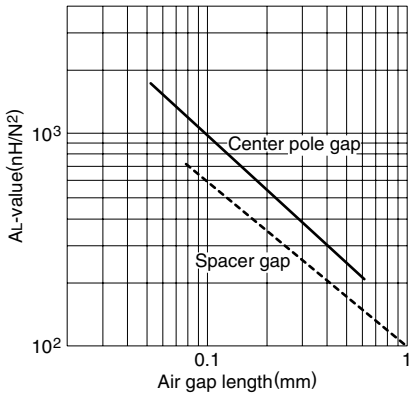
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC40RM10 gapped core (Typical)



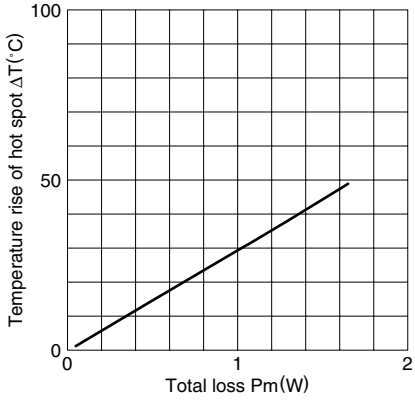
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40RM10 core (Typical)

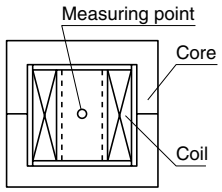


Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

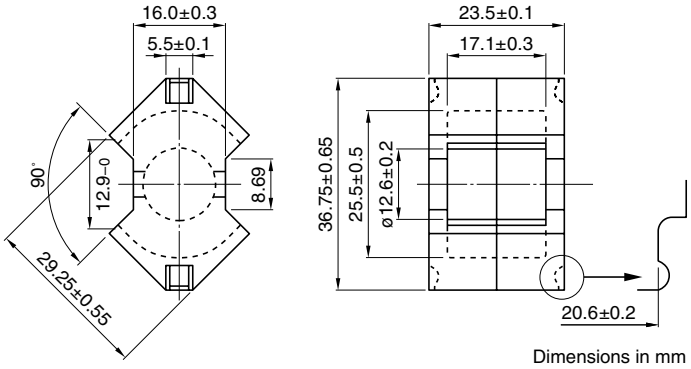
Temperature rise vs. Total loss for RM10 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



Based on JIS C 2516.



Dimensions in mm

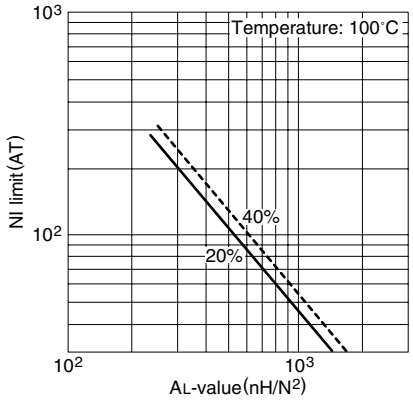
Parameter

Core factor	C_1	mm^{-1}	0.406
Effective magnetic path length	ℓe	mm	56.9
Effective cross-sectional area	Ae	mm^2	140
Effective core volume	Ve	mm^3	7960
Cross-sectional center pole area	Acp	mm^2	125
Minimum cross-sectional center pole area	Acp min.	mm^2	121
Cross-sectional winding area of core	Acw	mm^2	110
Weight (approx.)		g	42

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40RM12Z-12	4150 min. (1kHz, 0.5mA)* 9290 min. (100kHz, 200mT)	3.3 max.	344W (100kHz)

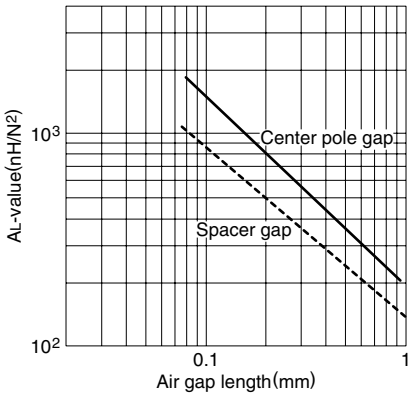
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC40RM12 gapped core (Typical)



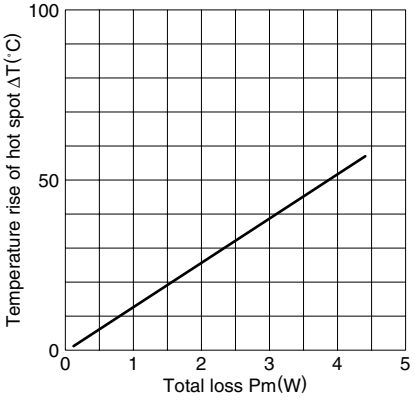
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40RM12 core (Typical)

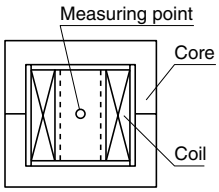


Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

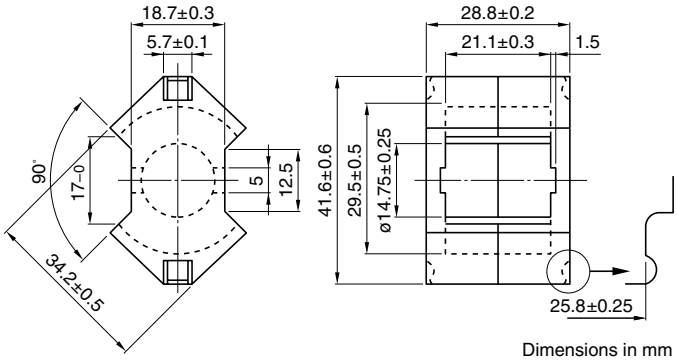
Temperature rise vs. Total loss for RM12 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



Based on JIS C 2516, IEC publication 431 and DIN 41980.



Dimensions in mm

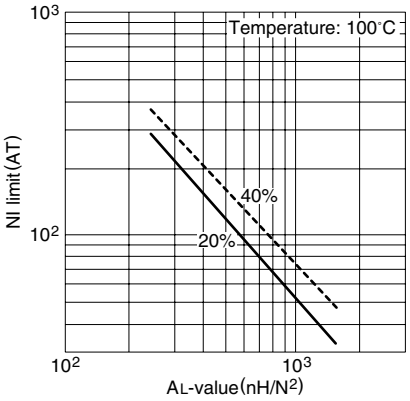
Parameter

Core factor	C_1	mm^{-1}	0.393
Effective magnetic path length	ℓe	mm	70.0
Effective cross-sectional area	Ae	mm^2	178
Effective core volume	Ve	mm^3	12500
Cross-sectional center pole area	Acp	mm^2	171
Minimum cross-sectional center pole area	Acp min.	mm^2	165
Cross-sectional winding area of core	Acw	mm^2	155
Weight (approx.)		g	70

Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC40RM14Z-12	4600 min. (1kHz, 0.5mA)* 9590 min. (100kHz, 200mT)	4.75 max.	376W (100kHz)

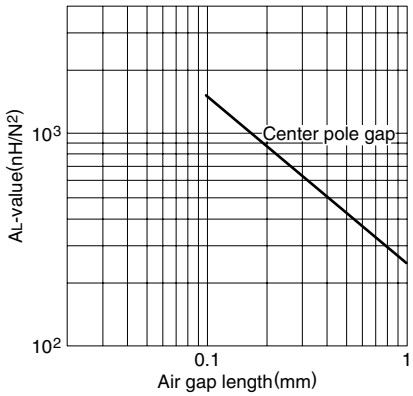
* *Coil: ø0.4 2UEW 100Ts*

NI limit vs. A_L-value for PC40RM14 gapped core (Typical)



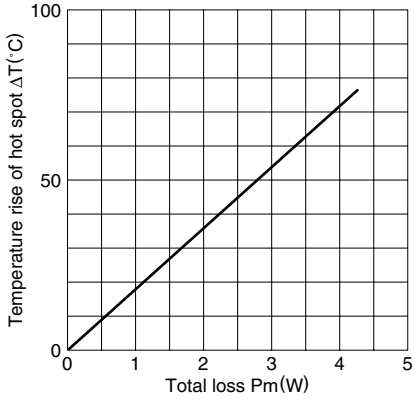
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC40RM14 core (Typical)

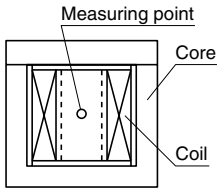


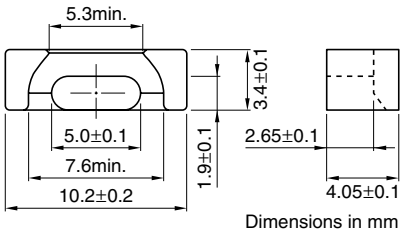
Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for RM14 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

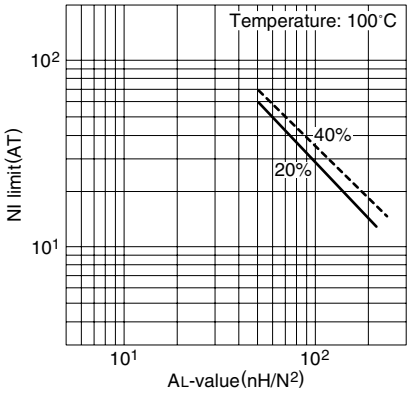
Parameter

Core factor	C_1	mm^{-1}	1.89
Effective magnetic path length	ℓe	mm	17.8
Effective cross-sectional area	Ae	mm^2	9.39
Effective core volume	Ve	mm^3	167
Cross-sectional center pole area	Acp	mm^2	8.73
Minimum cross-sectional area	Acp min.	mm^2	8.13
Cross-sectional winding area of core	Acw	mm^2	7.69
Weight (approx.)		g	1.1

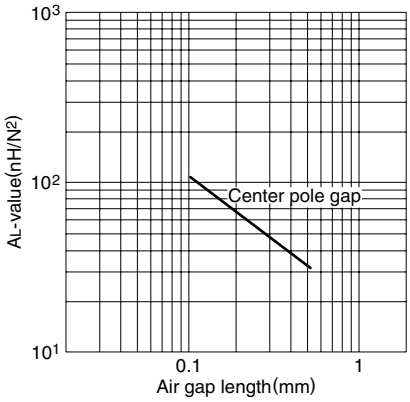
Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC10-Z	1000±25% (1kHz, 0.5mA)*	0.072 max.		5.4W (100kHz)
PC50EPC10-Z	660±25% (1kHz, 0.5mA)*		0.025 max.	13W (500kHz)

** Coil: ø0.1 2UEW 100Ts*

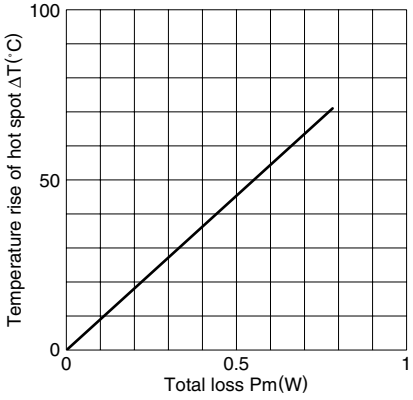
NI limit vs. A_L-value for PC44EPC10 gapped core (Typical)



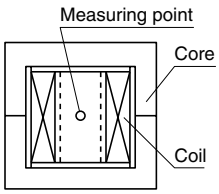
A_L-value vs. Air gap length for PC44EPC10 core (Typical)



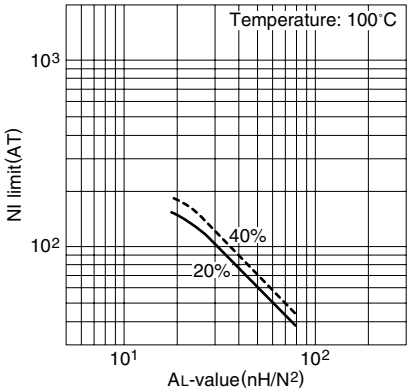
Temperature rise vs. Total loss for EPC10 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

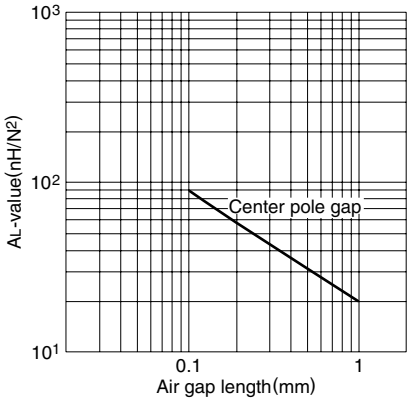


NI limit vs. A_L-value for PC50EPC10 gapped core (Typical)

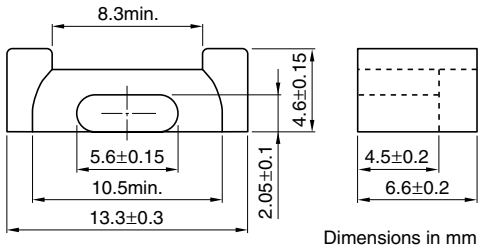


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC50EPC10 core (Typical)



Measuring conditions • Coil: ø0.1 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

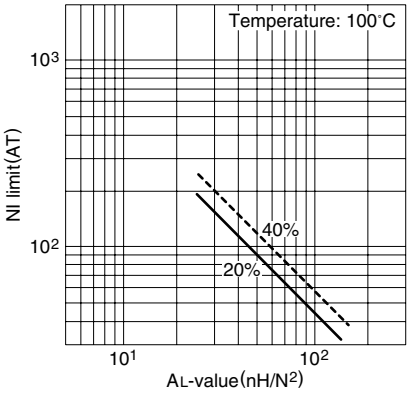
Parameter

Core factor	C_1	mm^{-1}	2.45
Effective magnetic path length	ℓe	mm	30.6
Effective cross-sectional area	Ae	mm^2	12.5
Effective core volume	Ve	mm^3	382
Cross-sectional center pole area	Acp	mm^2	10.6
Minimum cross-sectional area	Acp min.	mm^2	9.71
Cross-sectional winding area of core	Acw	mm^2	23.0
Weight (approx.)		g	2.1

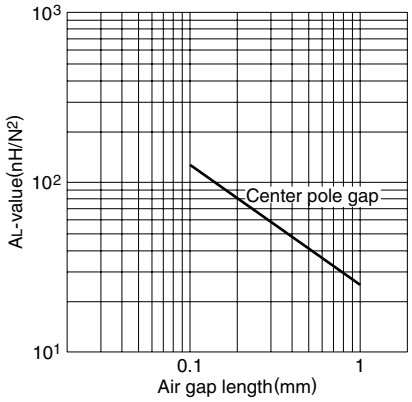
Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC13-Z	870±25% (1kHz, 0.5mA)*	0.14 max.		8W (100kHz)
PC50EPC13-Z	560±25% (1kHz, 0.5mA)*		0.039 max.	19W (500kHz)

* *Coil: ø0.2 2UEW 100Ts*

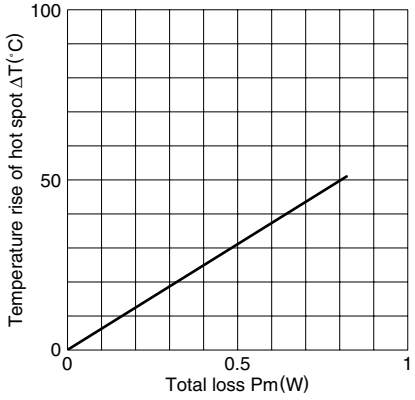
NI limit vs. A_L-value for PC44EPC13 gapped core (Typical)



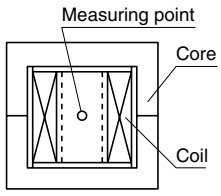
A_L-value vs. Air gap length for PC44EPC13 core (Typical)



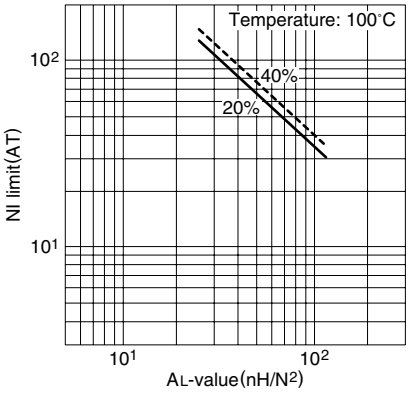
Temperature rise vs. Total loss for EPC13 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

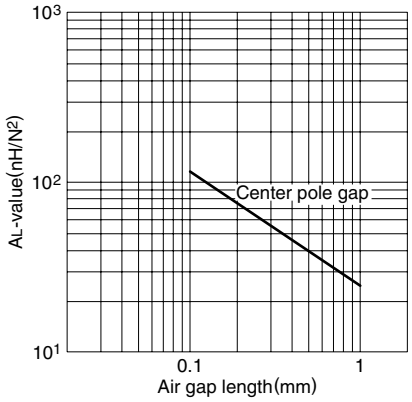


NI limit vs. A_L-value for PC50EPC13 gapped core (Typical)

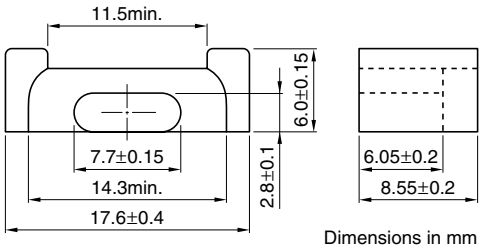


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC50EPC13 core (Typical)



Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

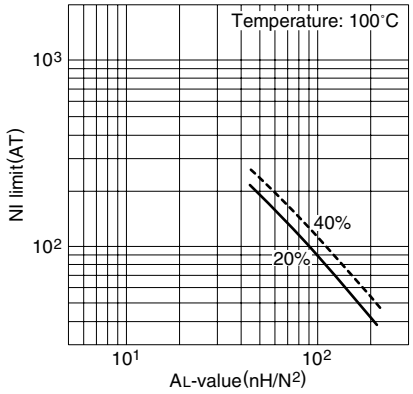
Parameter

Core factor	C_1	mm^{-1}	1.76
Effective magnetic path length	ℓe	mm	40.2
Effective cross-sectional area	Ae	mm^2	22.8
Effective core volume	Ve	mm^3	917
Cross-sectional center pole area	Acp	mm^2	19.9
Minimum cross-sectional area	Acp min.	mm^2	19.9
Cross-sectional winding area of core	Acw	mm^2	18.7
Weight (approx.)		g	4.5

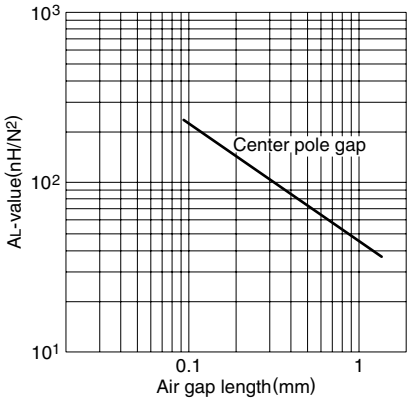
Part No.	AL-value (nH/N2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC17-Z	1150±25% (1kHz, 0.5mA)*	0.35 max.		20W (100kHz)
PC50EPC17-Z	740±25% (1kHz, 0.5mA)*		0.10 max.	35W (500kHz)

* *Coil: ø0.2 2UEW 100Ts*

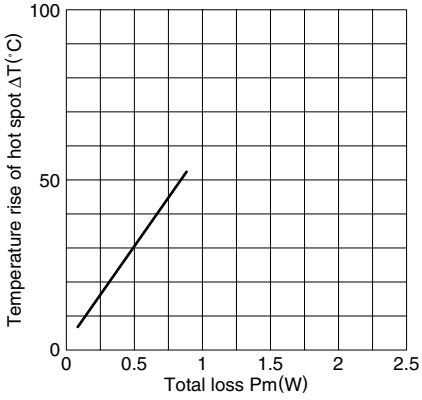
NI limit vs. AL-value for PC44EPC17 gapped core (Typical)



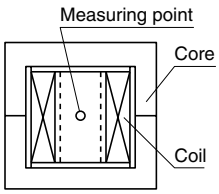
AL-value vs. Air gap length for PC44EPC17 core (Typical)



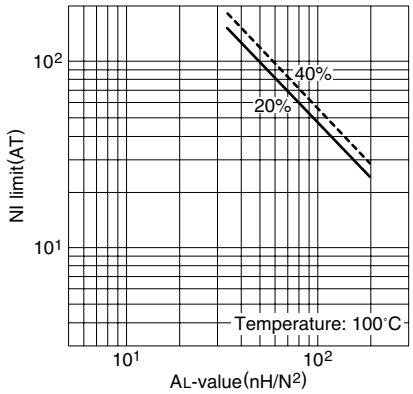
Temperature rise vs. Total loss for EPC17 core (Typical) (Ambient temperature: 25°C)



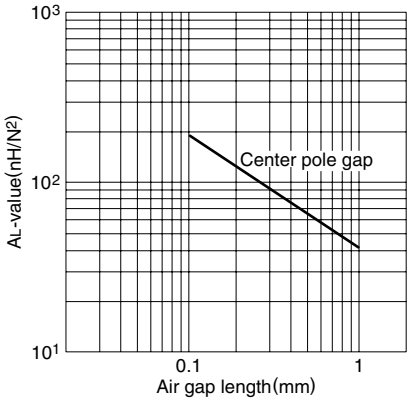
Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



NI limit vs. AL-value for PC50EPC17 gapped core (Typical)

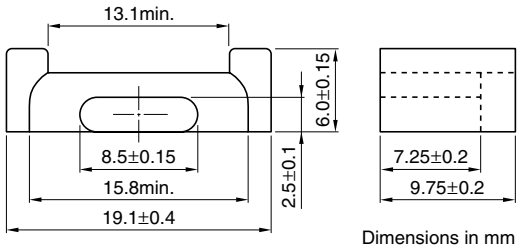


AL-value vs. Air gap length for PC50EPC17 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

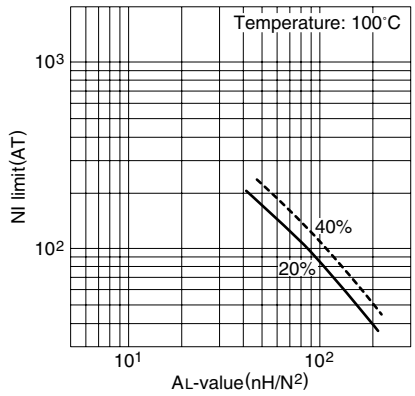
Parameter

Core factor	C_1	mm^{-1}	2.03
Effective magnetic path length	ℓe	mm	46.1
Effective cross-sectional area	Ae	mm^2	22.7
Effective core volume	Ve	mm^3	1050
Cross-sectional center pole area	Acp	mm^2	19.9
Minimum cross-sectional area	Acp min.	mm^2	18.7
Cross-sectional winding area of core	Acw	mm^2	54.4
Weight (approx.)		g	5.3

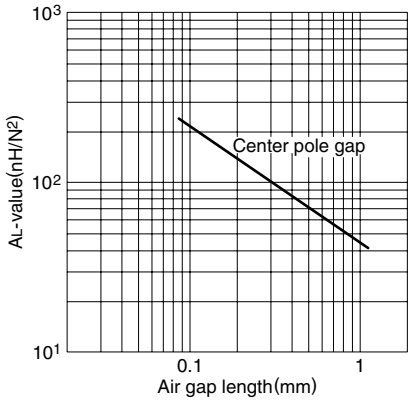
Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC19-Z	940±25% (1kHz, 0.5mA)*	0.4 max.		27W (100kHz)
PC50EPC19-Z	680±25% (1kHz, 0.5mA)*		0.12 max.	55W (500kHz)

* *Coil: ø0.2 2UEW 100Ts*

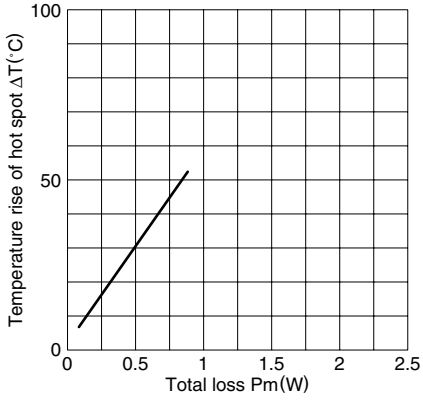
NI limit vs. A_L-value for PC44EPC19 gapped core (Typical)



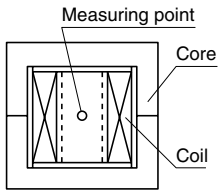
A_L-value vs. Air gap length for PC44EPC19 core (Typical)



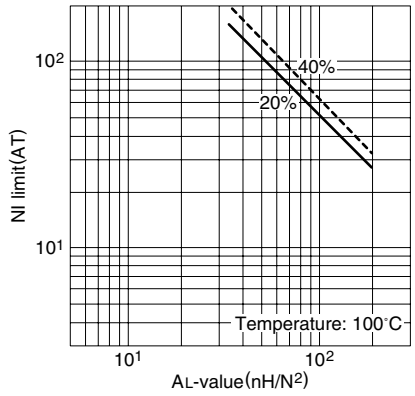
Temperature rise vs. Total loss for EPC19 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

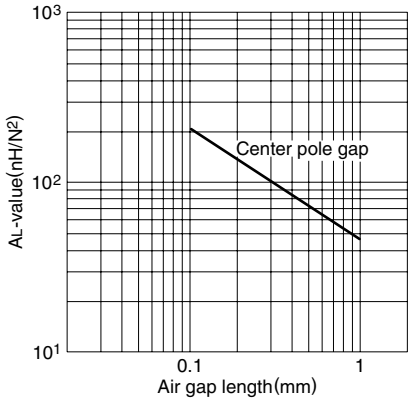


NI limit vs. A_L-value for PC50EPC19 gapped core (Typical)

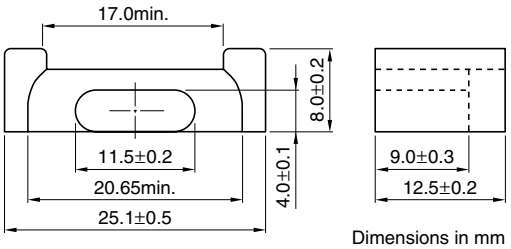


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC50EPC19 core (Typical)



Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

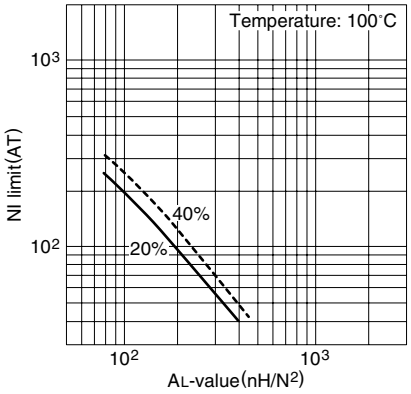
Parameter

Core factor	C_1	mm^{-1}	1.28
Effective magnetic path length	ℓe	mm	59.2
Effective cross-sectional area	Ae	mm^2	46.4
Effective core volume	Ve	mm^3	2750
Cross-sectional center pole area	Acp	mm^2	42.6
Minimum cross-sectional area	Acp min.	mm^2	40.6
Cross-sectional winding area of core	Acw	mm^2	85.5
Weight (approx.)		g	13

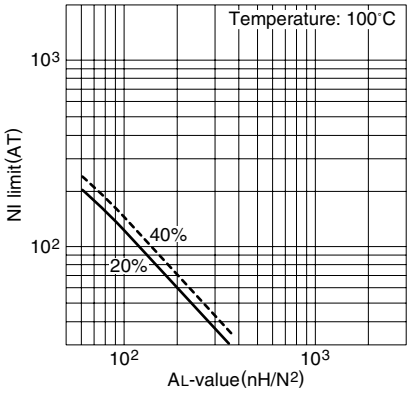
Part No.	AL-value (nH/N2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC25-Z	1560±25% (1kHz, 0.5mA)*	1.11 max.		63W (100kHz)
PC50EPC25-Z	1080±25% (1kHz, 0.5mA)*		0.32 max.	127W (500kHz)

** Coil: ø0.2 2UEW 100Ts*

NI limit vs. AL-value for PC44EPC25 gapped core (Typical)

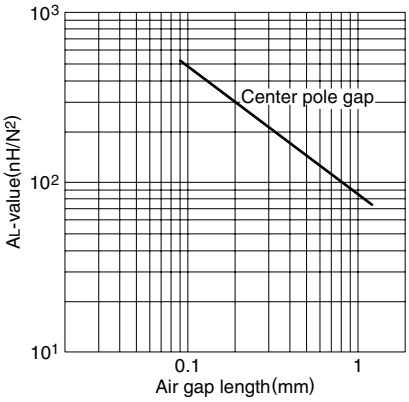


NI limit vs. AL-value for PC50EPC25 gapped core (Typical)

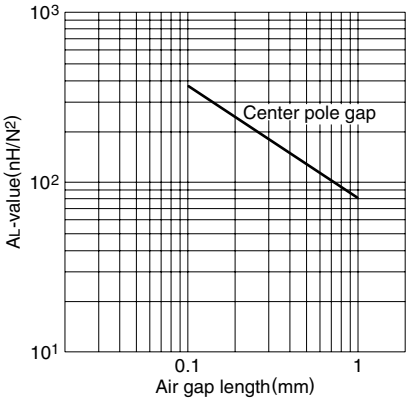


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44EPC25 core (Typical)

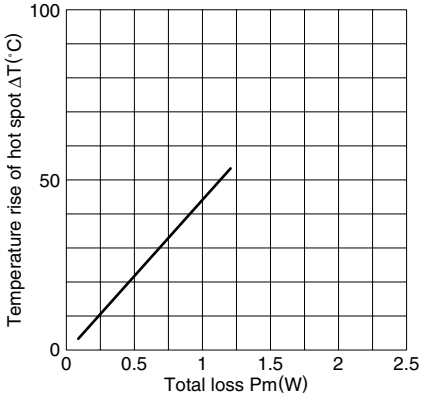


AL-value vs. Air gap length for PC50EPC25 core (Typical)

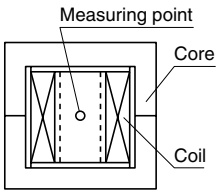


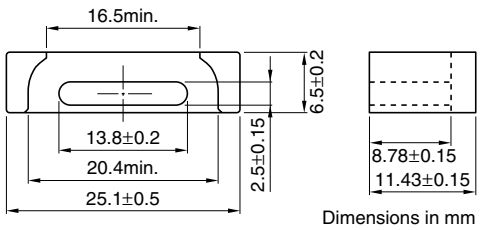
Measuring conditions • Coil: ø0.2 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EPC25 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

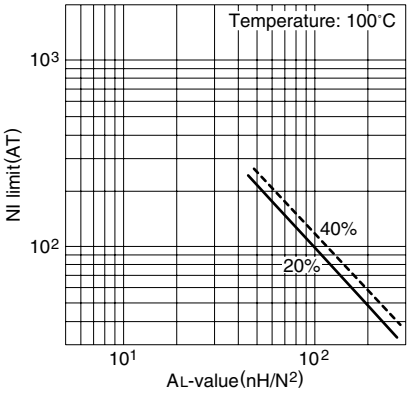
Parameter

Core factor	C_1	mm^{-1}	1.39
Effective magnetic path length	ℓe	mm	46.2
Effective cross-sectional area	Ae	mm^2	33.3
Effective core volume	Ve	mm^3	1540
Cross-sectional center pole area	Acp	mm^2	32.4
Minimum cross-sectional area	Acp min.	mm^2	30.3
Cross-sectional winding area of core	Acw	mm^2	62.1
Weight (approx.)		g	11

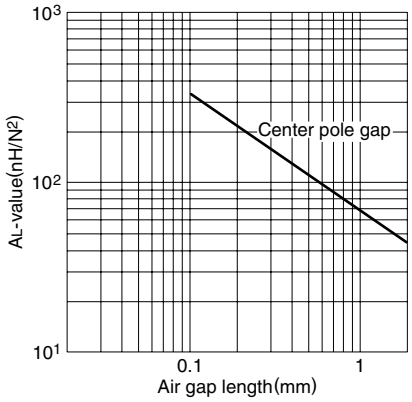
Part No.	A_L-value (nH/N²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC25B-Z	1560±25% (1kHz, 0.5mA)*	0.65 max.		45W (100kHz)
PC50EPC25B-Z	1080±25% (1kHz, 0.5mA)*		0.22 max.	87W (500kHz)

* *Coil: ø0.23 2UEW 100Ts*

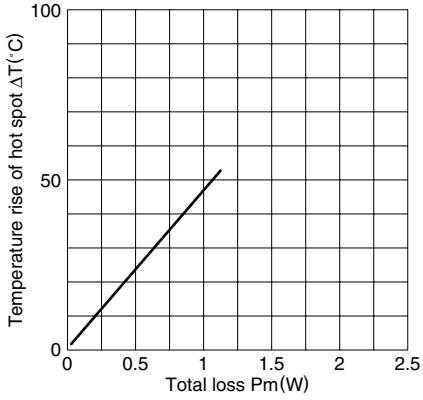
NI limit vs. A_L-value for PC44EPC25B gapped core (Typical)



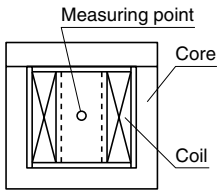
A_L-value vs. Air gap length for PC44EPC25B core (Typical)



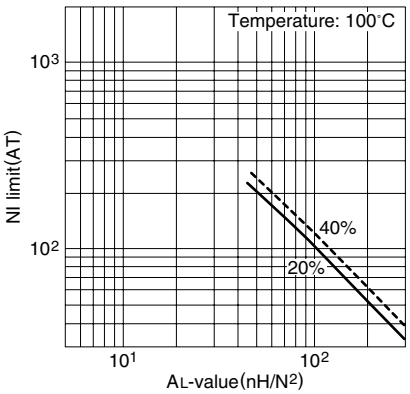
Temperature rise vs. Total loss for EPC25B core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

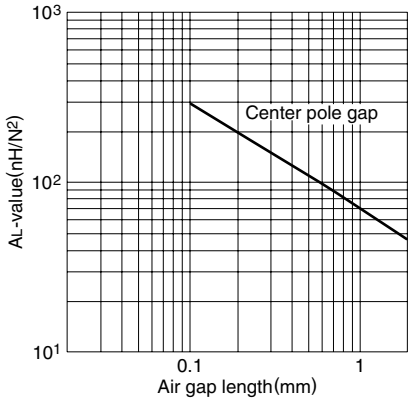


NI limit vs. A_L-value for PC50EPC25B gapped core (Typical)

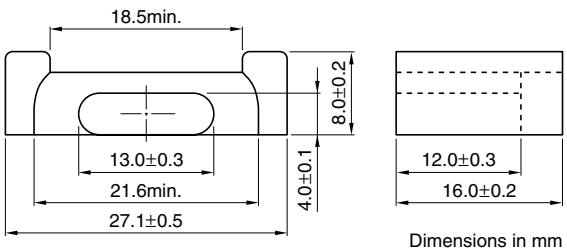


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC50EPC25B core (Typical)



Measuring conditions • Coil: ø0.23 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

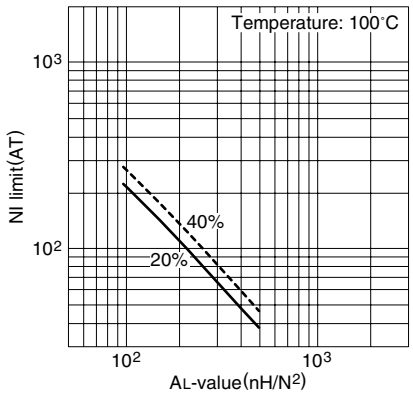
Parameter

Core factor	C_1	mm^{-1}	1.34
Effective magnetic path length	ℓe	mm	73.1
Effective cross-sectional area	Ae	mm^2	54.6
Effective core volume	Ve	mm^3	4000
Cross-sectional center pole area	Acp	mm^2	48.6
Minimum cross-sectional area	Acp min.	mm^2	46.5
Cross-sectional winding area of core	Acw	mm^2	108
Weight (approx.)		g	18

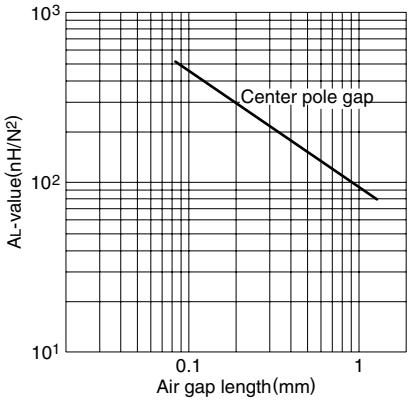
Part No.	AL-value (nH/N2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC27-Z	1540±25% (1kHz, 0.5mA)*	1.56 max.		80W (100kHz)
PC50EPC27-Z	1030±25% (1kHz, 0.5mA)*		0.46 max.	161W (500kHz)

* *Coil: ø0.3 2UEW 100Ts*

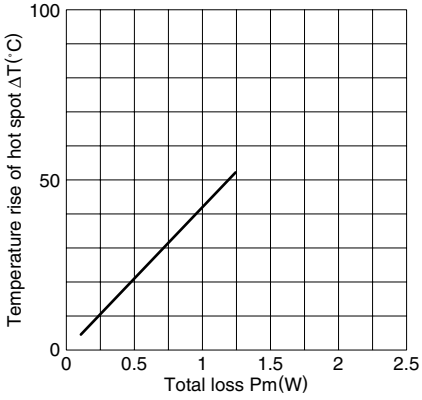
NI limit vs. AL-value for PC44EPC27 gapped core (Typical)



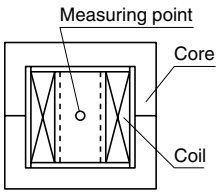
AL-value vs. Air gap length for PC44EPC27 core (Typical)



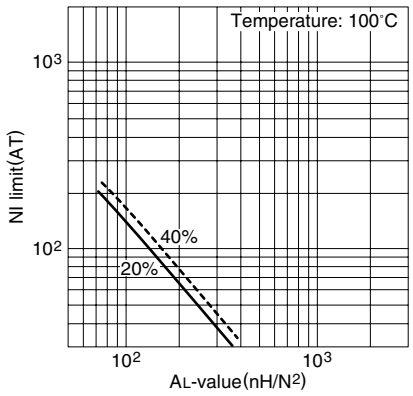
Temperature rise vs. Total loss for EPC27 core (Typical) (Ambient temperature: 25°C)



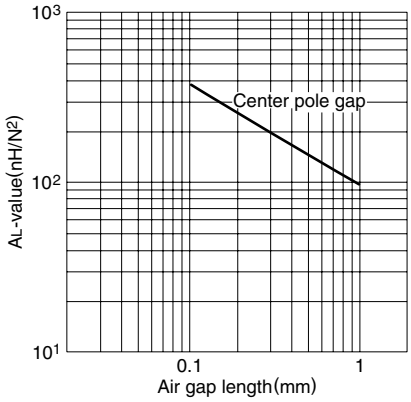
Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)



NI limit vs. AL-value for PC50EPC27 gapped core (Typical)

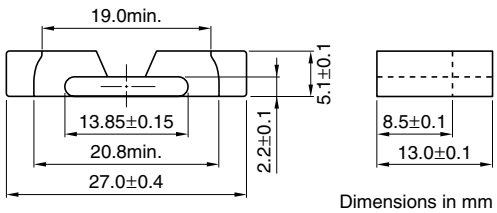


AL-value vs. Air gap length for PC50EPC27 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ø0.3 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



Dimensions in mm

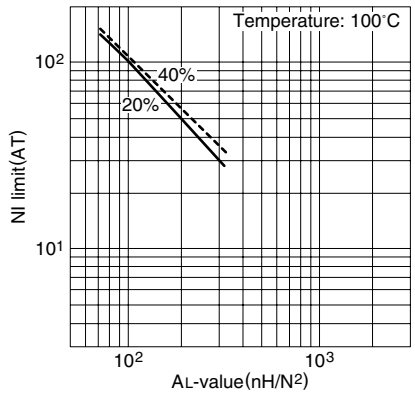
Parameter

Core factor	C_1	mm^{-1}	1.70
Effective magnetic path length	ℓe	mm	55.9
Effective cross-sectional area	Ae	mm^2	33.0
Effective core volume	Ve	mm^3	1840
Cross-sectional center pole area	Acp	mm^2	29.7
Minimum cross-sectional center pole area	Acp min.	mm^2	29.7
Cross-sectional winding area of core	Acw	mm^2	60.4
Weight (approx.)		g	10

Part No.	A_L-value (nH/N^2)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44EPC27N-Z	1400±25% (1kHz, 0.5mA)*	0.73 max.	43W (100kHz)

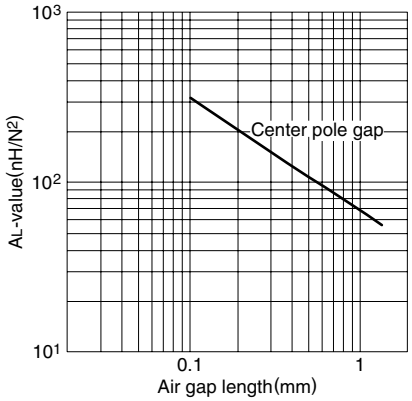
* *Coil: ø0.3 2UEW 100Ts*

NI limit vs. A_L-value for PC44EPC27N gapped core (Typical)



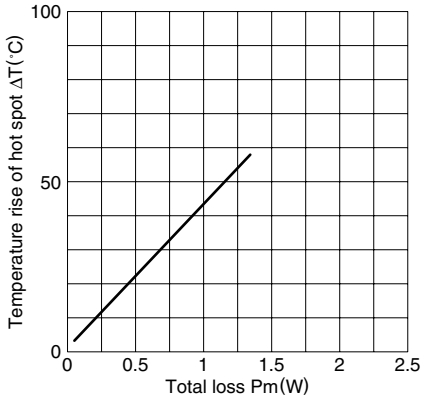
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

A_L-value vs. Air gap length for PC44EPC27N core (Typical)

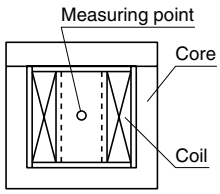


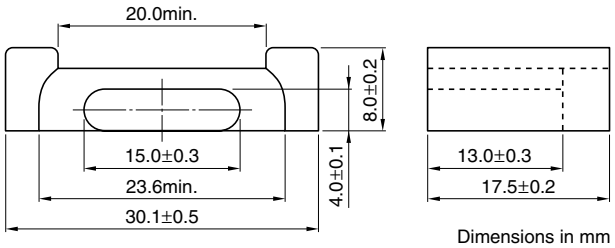
Measuring conditions • Coil: ø0.3 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for EPC27N core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)





Dimensions in mm

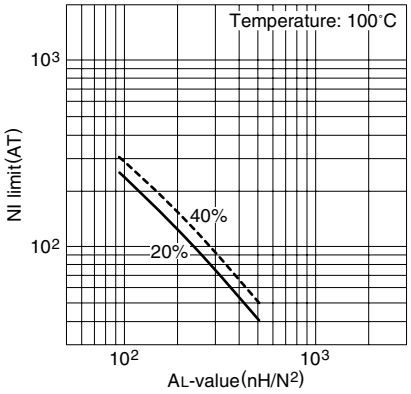
Parameter

Core factor	C_1	mm^{-1}	1.34
Effective magnetic path length	ℓe	mm	81.6
Effective cross-sectional area	Ae	mm^2	61.0
Effective core volume	Ve	mm^3	4980
Cross-sectional center pole area	Acp	mm^2	56.6
Minimum cross-sectional area	Acp min.	mm^2	54.3
Cross-sectional winding area of core	Acw	mm^2	117
Weight (approx.)		g	23

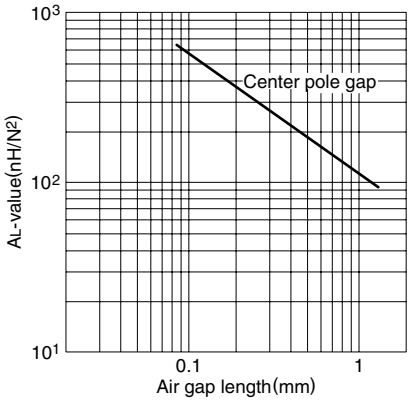
Part No.	AL-value (nH/N2)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44EPC30-Z	1570±25% (1kHz, 0.5mA)*	2.03 max.		85W (100kHz)
PC50EPC30-Z	1060±25% (1kHz, 0.5mA)*		0.58 max.	180W (500kHz)

** Coil: ø0.3 2UEW 100Ts*

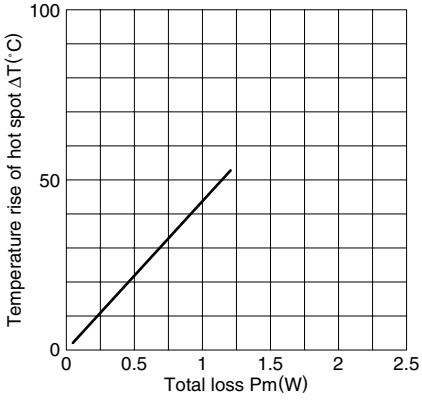
NI limit vs. AL-value for PC44EPC30 gapped core (Typical)



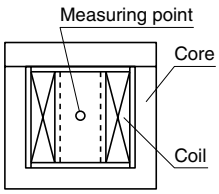
AL-value vs. Air gap length for PC44EPC30 core (Typical)



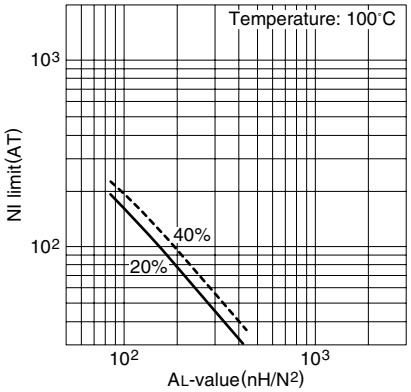
Temperature rise vs. Total loss for EPC30 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45(%)RH. respectively. (approx. 400×300×300cm)

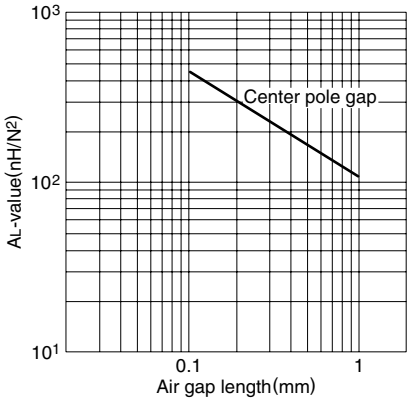


NI limit vs. AL-value for PC50EPC30 gapped core (Typical)



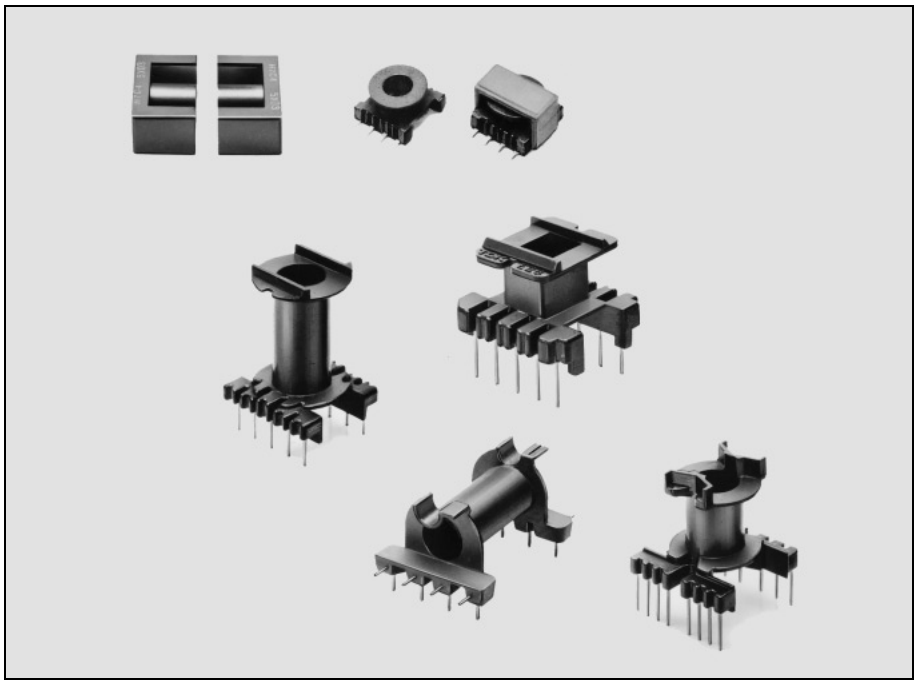
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC50EPC30 core (Typical)



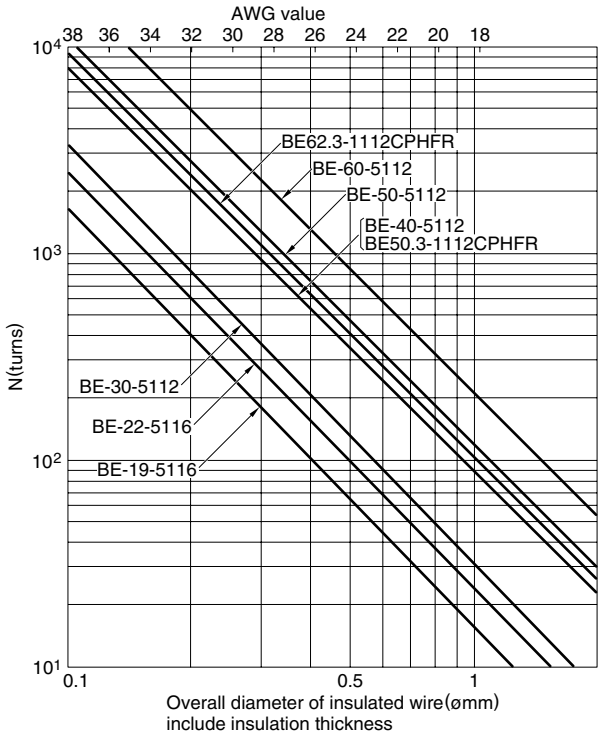
Measuring conditions • Coil: ø0.3 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Maximum Number of Turns on Bobbins

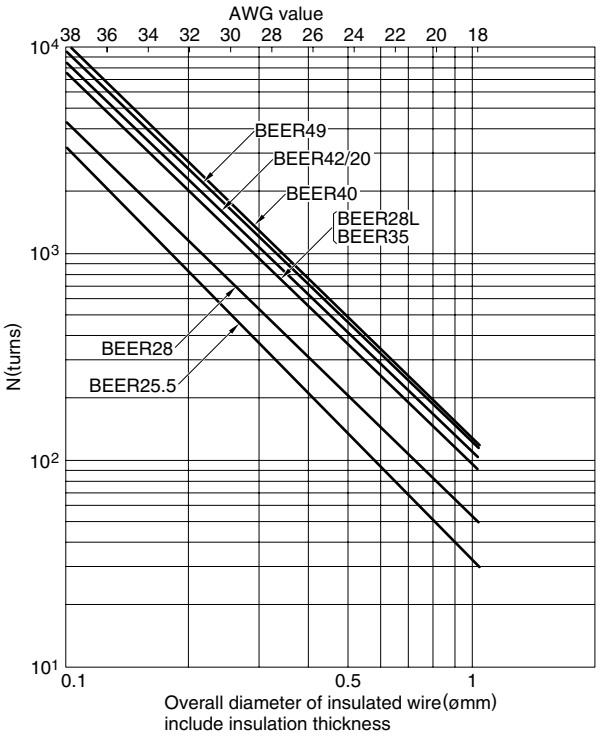


Maximum Number of Turns on Bobbins

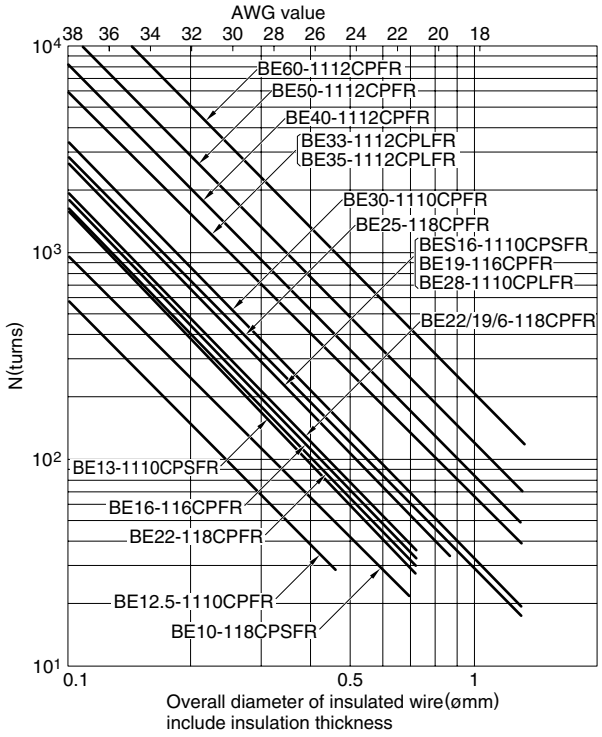
EI and EE Series (without terminal pin)



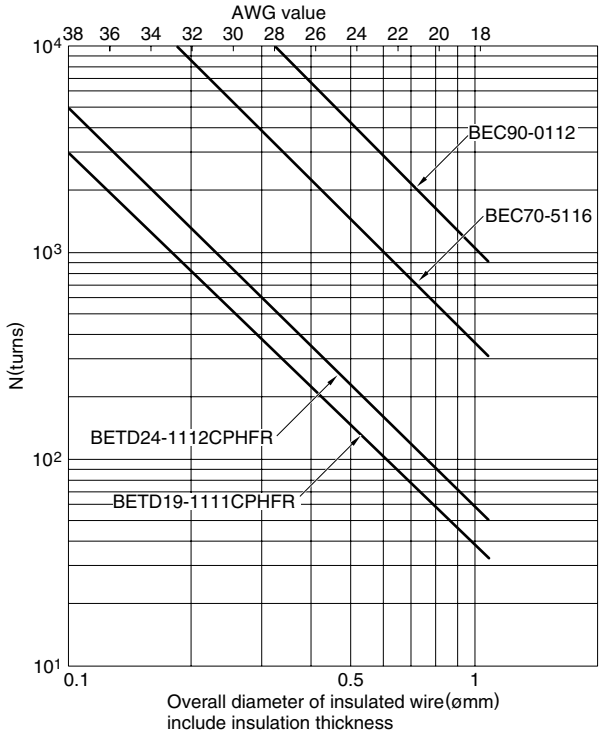
EER Series



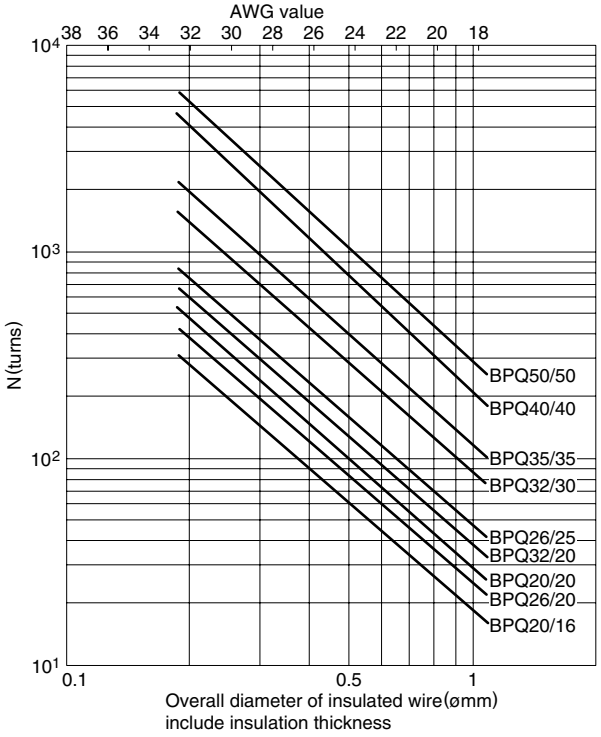
EI and EE Series (with terminal pin)



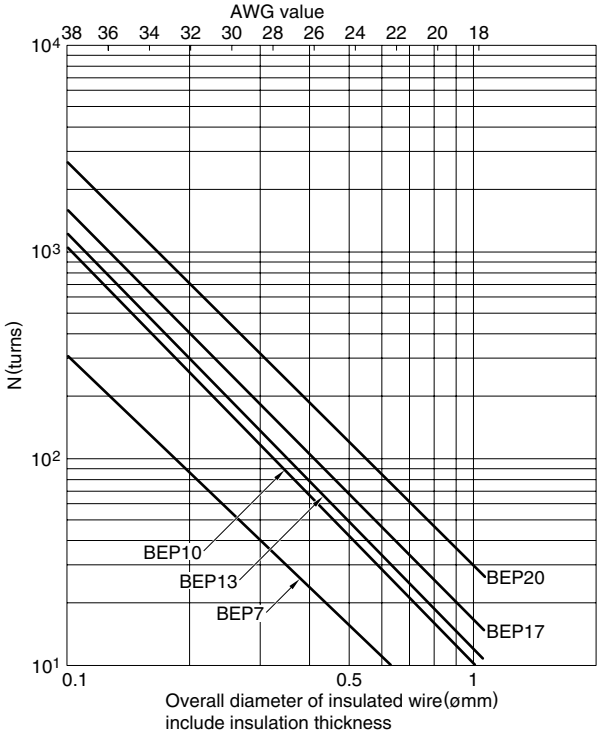
EC and ETD Series



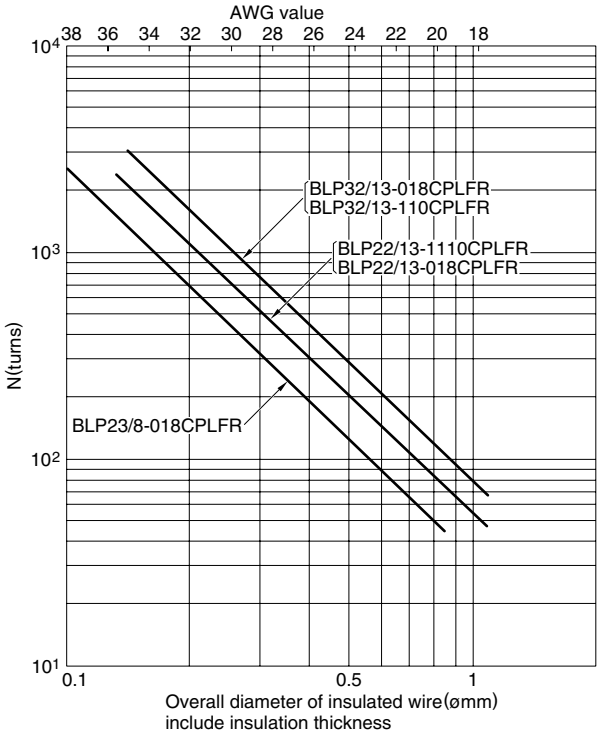
PQ Series



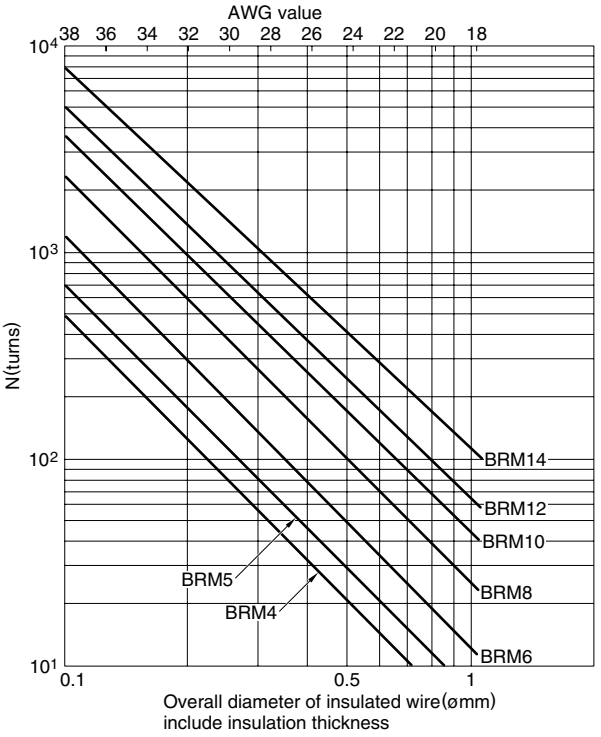
EP Series



LP Series

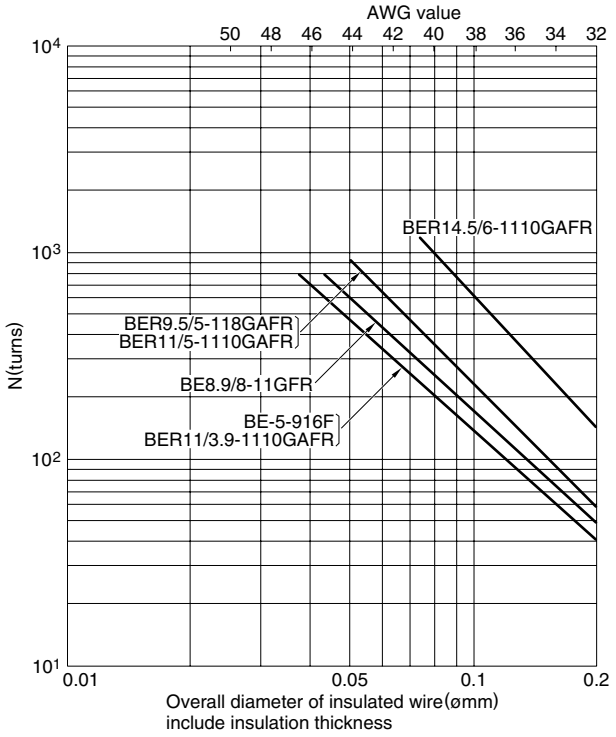


RM Series

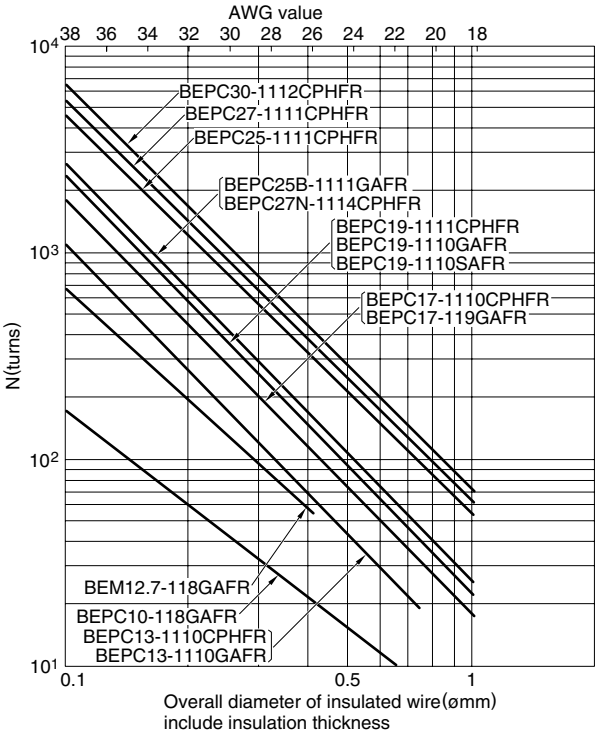


Maximum Number of Turns on Bobbins

SMD Series



EPC and EEM Series



Wire Table

Wire Table

AWG	AWG dia.(mm)	AWG area(mm^2)	Single dia.(mm)	Single area(mm^2)	Heavy dia.(mm)	Heavy area(mm^2)
40	0.078	0.0053	0.093	0.0068	0.100	0.0078
39	0.089	0.0066	0.104	0.0085	0.112	0.0099
38	0.102	0.0083	0.117	0.0108	0.126	0.0125
37	0.114	0.0105	0.131	0.0135	0.141	0.0156
36	0.127	0.0132	0.147	0.0169	0.158	0.0195
35	0.142	0.0166	0.164	0.0212	0.176	0.0243
34	0.160	0.0209	0.184	0.0265	0.196	0.0303
33	0.180	0.0264	0.205	0.0330	0.219	0.0376
32	0.203	0.0332	0.229	0.0412	0.244	0.0467
31	0.226	0.0418	0.256	0.0513	0.271	0.0578
30	0.254	0.0526	0.285	0.0640	0.302	0.0717
29	0.287	0.0663	0.319	0.0797	0.336	0.0888
28	0.320	0.0834	0.356	0.0993	0.374	0.1099
27	0.360	0.1050	0.397	0.1237	0.416	0.1362
26	0.404	0.1322	0.443	0.1542	0.464	0.1688
25	0.454	0.1664	0.495	0.1922	0.516	0.2093
24	0.510	0.2095	0.552	0.2397	0.575	0.2596
23	0.574	0.2638	0.617	0.2990	0.641	0.3222
22	0.642	0.3321	0.689	0.3731	0.714	0.4001
21	0.724	0.4181	0.770	0.4659	0.796	0.4972
20	0.812	0.5624	0.861	0.5820	0.887	0.6183
19	0.910	0.6627	0.962	0.7272	0.990	0.7693
18	1.024	0.8343	1.076	0.9092	1.104	0.9578
17	1.156	1.0504	1.203	1.1371	1.233	1.1933
16	1.298	1.3224	1.346	1.4228	1.376	1.4877
15	1.456	1.6648	1.506	1.7809	1.537	1.8559
14	1.634	2.0959	1.685	2.2301	1.717	2.3165
13	1.833	2.6386	1.886	2.7935	1.919	2.8931
12	2.057	3.3219	2.111	3.5006	2.145	3.6153
11	2.308	4.1821	2.364	4.3882	2.399	4.5201
10	2.589	5.2651	2.647	5.5024	2.683	5.6542
9	2.905	6.6285	2.964	6.9018	3.002	7.0763
8	3.260	8.3449	3.320	8.6594	3.359	8.8599
7	3.657	10.5059	3.720	10.8674	3.759	11.0977
6	4.104	13.2264	4.168	13.6419	4.208	13.9062