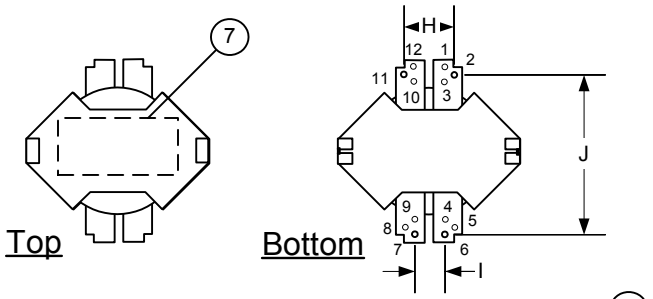
ECO	REV	DESCRIPTION	DATE	APPROVED
N/A	0H	RELEASED -G PART	06/20/05	RoHS

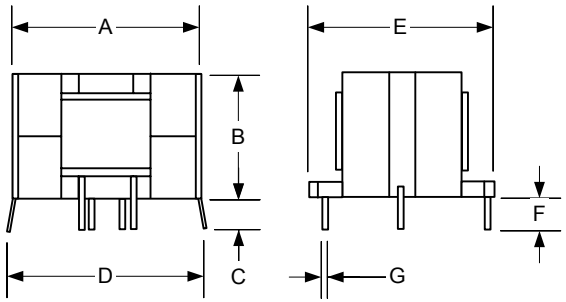
UNIT: MM					
A	26.0 MAX	E	25.0 MAX	I	3.6 ±0.3
B	17.5 MAX	F	4.0 ±0.5	J	19.8 ±0.3
C	3.0 MIN	G	0.6 ±0.1		
D	26.0 ±0.5	H	7.2 ±0.3		

Construction

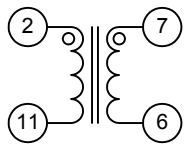
BOBBIN

Start	Finish	Turns	Description
		3	Tape, #1350
7	6	2	Wire, 30 AWG, SPN
		2	Tape, #1350
2	11	43	Wire, 30/38 SPSN





Sides



Schematic

Notes:
1. Class B insulation system required.
2. Assemble and secure cores and bobbin with clips.
3. Vacuum impregnate with varnish.
4. All component substitutions must be approved in writing by Power-One.
5. Test requirements:
   Pins 2 - 11: 140uH +/-5% @ 5.2A DC; current rating Pins 2 - 11: 1.8A RMS
   Turns ratio and polarity
   Breakdown voltage between windings @ 1000VAC 50/60Hz 2mA for 1 minute
   Breakdown voltage from each winding to core @ 500VAC 50/60Hz 2mA for 1 minute
6. Insulation resistance winding to winding and winding to core >100Mohms.
7. Mark per product safety requirements, insulation system, part number, revision level, Date Code and MFR Code in location shown.
8. Remove bobbin pin #'s: 1, 3, 4, 5, 8, 9, 10, 12.
9. **Finished part, and all materials used , must comply with the RoHS Directive 2002/95/EC**

released uncontrolled

ITEM	QTY.	PART NO.	DESCRIPTION/MFR
1	1	RM8/1-3C90 - 1.25MM	CORE, PHILIPS, GAPPED
2	**1**	**CSV-RM8-1S-8P**	**BOBBIN, PHILIPS PIN FINISH TO BE LEAD(Pb) FREE**
ALT	**1**	**RM-8 V.TYPE w/12PINS;B-046**	**BOBBIN, Bobbin and base Industrial Ltd PIN FINISH TO BE LEAD (Pb) FREE**
3	2	CL1P-RM8/1	CLIP, PHILIPS
4	A/R	#1350	TAPE, POLYESTER - 3M
5	A/R	30/38 SPSN	WIRE
6	A/R	30AWG SPN	WIRE
7	A/R	DV130-1 130C	VARNISH, JOHN C. DOLPH E76517(M)
8	A/R	#1350	TAPE, POLYESTER

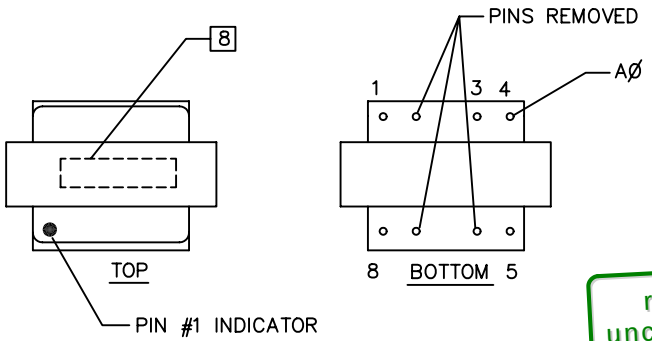
POWER-ONE®

Inductor, PFC

Tolerance:
0.00 to 30.00mm = ±0.10mm
30.01 to 80.00mm = ±0.13mm
80.01 to 150.00mm = ±0.15mm
>150.01mm = ±0.20mm

SIZE	FSCM NO	DWG NO	REV
A	54407	182-700706-G	0H

SCALE		SHEET
none		1 OF 1

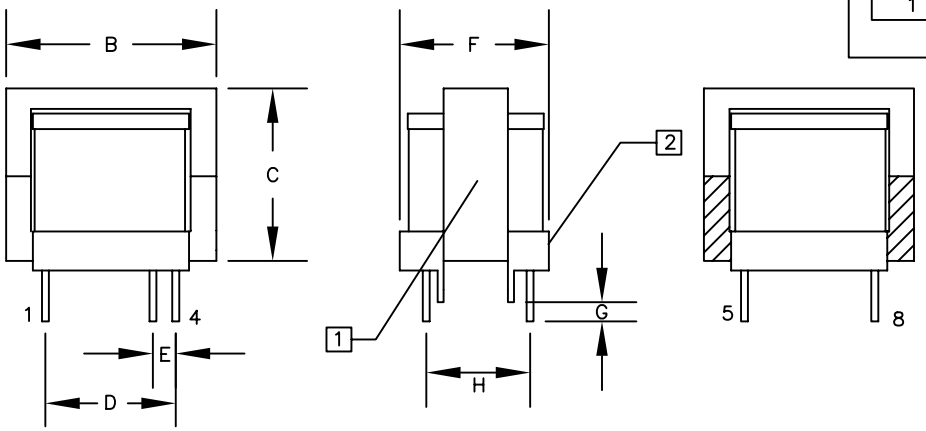


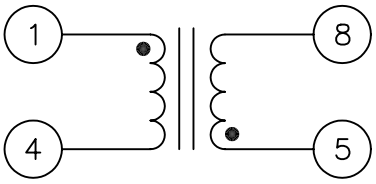
UNIT: MM			
A	0.8±0.1	E	2.4±0.3
B	20.0 MAX	F	20.0 MAX
C	21.5 MAX	G	4.5±0.5
D	10.0±0.3	H	15.5±0.3

released uncontrolled

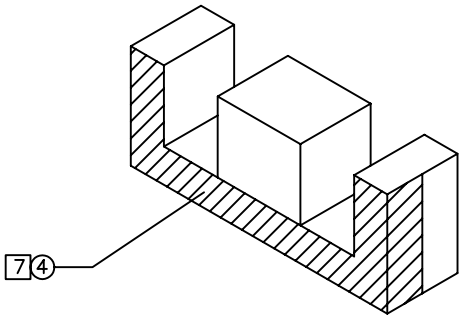
CONTRUCTION

START	FINISH	TURNS	DESCRIPTION
		2	TAPE, #1350
5	8	4	WIRE, TEX-E.0.2MM
		2	TAPE, #1350
1	4	92	WIRE, 7/36 SPSN LITZ





SCHEMATIC DIAGRAM



9. FINISHED PART AND ALL MATERIALS MUST COMPLY TO THE RoHS DIRECTIVE 2002/95/EC BOBBIN FINISH MUST BE LEAD (Pb) FREE.

8. MARK PER PRODUCT SAFETY MARKING REQUIREMENT, INSULATION SYSTEM, PART NUMBER,REV LEVEL, DATA CODE AND MFG CODE IN LOCATION SHOWN.

7. TAPE FACE OF CORE WITH ITEM 4, THIS CORE IS INSERTED IN BOTTOM OF COIL ONLY FACING PINS 5 AND 8.

6. REMOVE PINS #2,6,7

5. INSULATION RESISTANCE WINDING TO WINDING AND WINDING TO CORE >100Mohms.

4. TEST REQUIREMENTS:

PINS 1-4: 761uH TO 931uH @ 1.7 ADC
TURNS RATIO AND POLARITY
BREAKDOWN VOLTAGE BETWEEN WINDING @ 3000VAC 50/60Hz 2mA FOR 1 MINUTE
BREAKDOWN VOLTAGE FROM EACH WINDING TO CORE @ 500VAC 50/60Hz 2mA FOR 1 MINUTE

3. ALL COMPONENT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY POWER-ONE.

2. VACUUM IMPREGNATE WITH VARNISH.

1. CLASS B INSULATION SYSTEM REQUIRED.

NOTES:

ITEM	QTY	PART NO.	DESCRIPTION
1	1	E19/8/9-3C85-E100	CORE, PHILIPS ALT: 2 EA E19/8/5-3C85 GAPPED
2	1	TF-1929	BOBBIN, SHU-LIN ENTERPRISES-TAIWAN
3	A/R	7/36 SPSN LITZ	WIRE, MAIN WINDING
4	A/R	#1350	TAPE, POLYESTER-3M
5	A/R	TEX-E 0.2MM ALT: T32A01TXXX-1.5	WIRE, AUX-FURUKAWA ELECTRIC RUBADUE WIRE CO.
6	A/R	DV130-1-130C	VANISH, JOHN C. DOLPH E76517(M)

LTR	ECO	DESCRIPTION	DATE	APPR
0J	N/A	INITIAL RELEASE -G	6-21-05	RoHS

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.
TOLERANCES:
.XX = ± .02
.XXX = ± .010
ANGLES: ± 30'
FRACTIONS: ± 1/32

THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF POWER-ONE, INC. AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.

APPROVALS		DATE
DRW	NSS	06/07/00
CHK	_	_
ENG	_	_
APP	_	_
MFG	_	_

SIZE A | CODE IDENT. NO. 54407

DO NOT SCALE DRAWING

POWER-ONE™
POWER SUPPLIES
CAMARILLO, CALIF. 93012 (805) 987-8741

USED ON MPB125

TITLE
INDUCTOR, BOOST

DWG NO. 182-700707-G | REV 0J

SCALE NONE | SHEET 1 OF 1

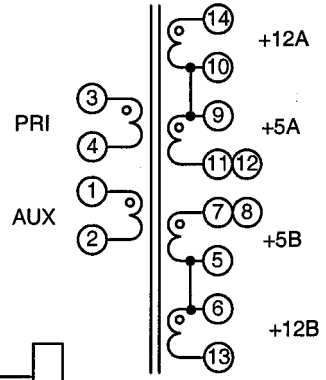
REV	DESCRIPTION	DATE	APPROVED
F	REDRAWN	08/17/00	DK
G	CORRECT BOTTOM VIEW; NOTE 3 TO 0.05MM, NOTE 6 to include 50/60Hz, CONSTRUCTION	10/16/00	DK
H	Add approved vendors, chg marking i.d.	03/15/01	DBB
J	Changed notes 3 and 7, Removed Approved Vendors	06/20/02	KA
K	ADDED 182 PREFIX	07/08/02	KA

UNIT: MM	
A	34.5 MAX
B	28.2 MAX
C	24.0 MAX
D	1.0 ±0.1

Construction

Start	Finish	Turns	Description
		3	TAPE, #56
6	13	4	Wire, 5X7X36AWG, SPN LITZ
7, 8	5, 6	3	Wire, 4X7X7X36AWG, SPN LITZ
14	10	4	Wire, 5X7X36AWG, SPN LITZ
9,10	11, 12	3	Wire, 4X7X7X36AWG, SPN LITZ
		12	TAPE, #56
1	2	8	Wire, 34AWG, HPN (2)
		2	TAPE, #56
3	4	114	PRI - Wire, 27AWG, HPN (2)

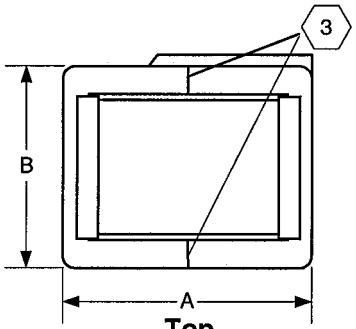
BOBBIN



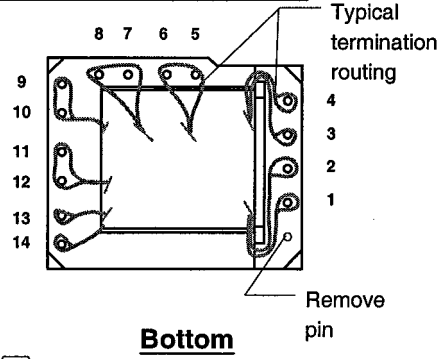
Schematic

Notes:

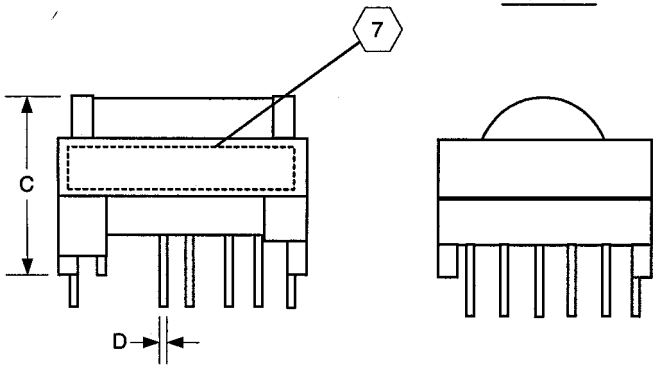
1. Class B insulation system required. Alternate insulating and barrier tapes must be CTI Group 1.
2. 3.2mm margins each side using 3M#44 or equivalent. Insulate leads in thin-wall TFE tubing extending past margin tape into winding.
3. Assemble cores to bobbin using 0.05mm spacers each side, or gap core center leg.
4. Vacuum impregnate with varnish.
5. All component substitutions must be approved in writing by Power-One.
6. Test requirements:
   - Hipot primary to secondary windings 3000VAC@2mA, 50/60Hz
   - HIpot primary to core at 3000VAC@2mA 50/60Hz
   - Hipot secondary to core 500VAC@2mA 50/60Hz
   - Duration of hipot tests to be 1 minute, alternative time 1 second at 120% voltage applied
   - Turn ratio and polarity
   - Inductance Pin 3 to Pin 4: 4.8mH ±20%
   - Interwinding capacitance with Pins 3,4 (shorted) to Pins 8, 9 (shorted): 15pF max (ref)
7. Mark per product safety requirements, insulation system, part number, revision level, Date Code and MFR Code in location shown.



Top



Bottom



released uncontrolled

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	700718F	BOBBIN - N2POWER
2	1	FEER-25.5B-NC2H	CORE, NICERA
3	A/R	27AWG, HPN	WIRE
4	A/R	34AWG, HPN	WIRE
5	A/R	4x7x7x36AWG, SPN LITZ	WIRE
6	A/R	5x7x36AWG, SPN LITZ	WIRE
7	A/R	DV-130-1	VARNISH, JOHN C. DOLPH
8	A/R	TFL150V 200C	TUBING, TEFLON, E17982(M)
9	A/R	#56	TAPE, POLYESTER, 3M
10	A/R	#44	TAPE, MARGIN, 3M

Power-one®

Transformer, converter

Tolerance:
0.00 to 30.00mm = ±0.10mm
30.01 to 80.00mm = ±0.13mm
80.01 to 150.00mm = ±0.15mm
>150.01mm = ±0.20mm

SIZE	FSCM NO	DWG NO	REV
A	54407	182-700709	K

SCALE		SHEET
none		1 OF 1