

承认书编号 NO: _____

TO: _____

系列 SER.NO.: LTM

规格 SPEC.NO.: _____

承 认 书

APPROVAL SHEET

FOR AL. ELECTROLYTIC CAPACITORS

承 认
APPROVED BY:

料号 (Customer)	料号 (Dumicon)	规格 Description	Dφ*L	加工形式 (mm)
	LTM102M050G400RC	1000UF/50V	10X40	直脚散装

签认后，请送回一份。

PLEASE RETURN US ONE COPY YOUR SIGNED SPECIFICATION AFTER YOU APPROVED OF IT.

制造 Manufacture			客户 Customer		
核 准 APPROVED BY:	审 核 CHECKED BY:	经 办 DESIGNED BY:	核 准 APPROVED BY:	审 核 CHECKED BY:	经 办 DESIGNED BY:
					



金华市鑫隆电子有限公司
 JINHUA XINLONG ELECTRONIC CO.,LTD
 浙江省金华市金东区东湄工业区
 Dong Mei Industrial Zone, Jindong District, Jinhua City, Zhejiang



JINHUA XINLON ELECTRONIC CO.,LTD

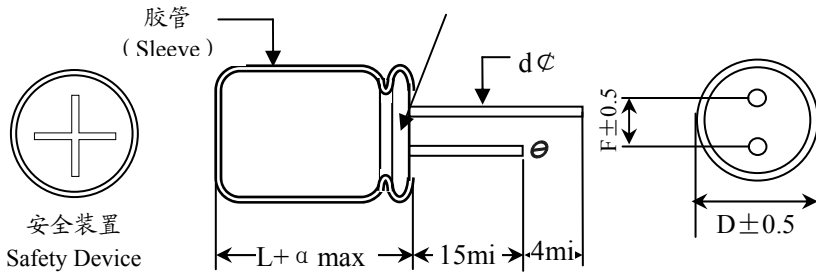
FOR APPROVAL

Aluminum Electrolytic Capacitors LTM Type

1. Electric Characteristics

Dumicon P/N	Cap. (μF)	Cap Tol. (%)	Rate W.V (VDC)	Surge Volt (VDC)	D.F (%)	Ripple Current 100KHz/105°C (mA)	Max.Im. 100Hz/20°C (Ω)	LC (μA)	Oper. Temp. (°C)	Case Size DΦ* L (mm)	USER P/N
LTM102M050G400RC	1000	± 20	50	63		1830	0.062	500	-55 ~ +105	10*40	

2. Diagram of Dimensions (Unit=mm):



备注: 直径小于 8mm 产品无防爆装置

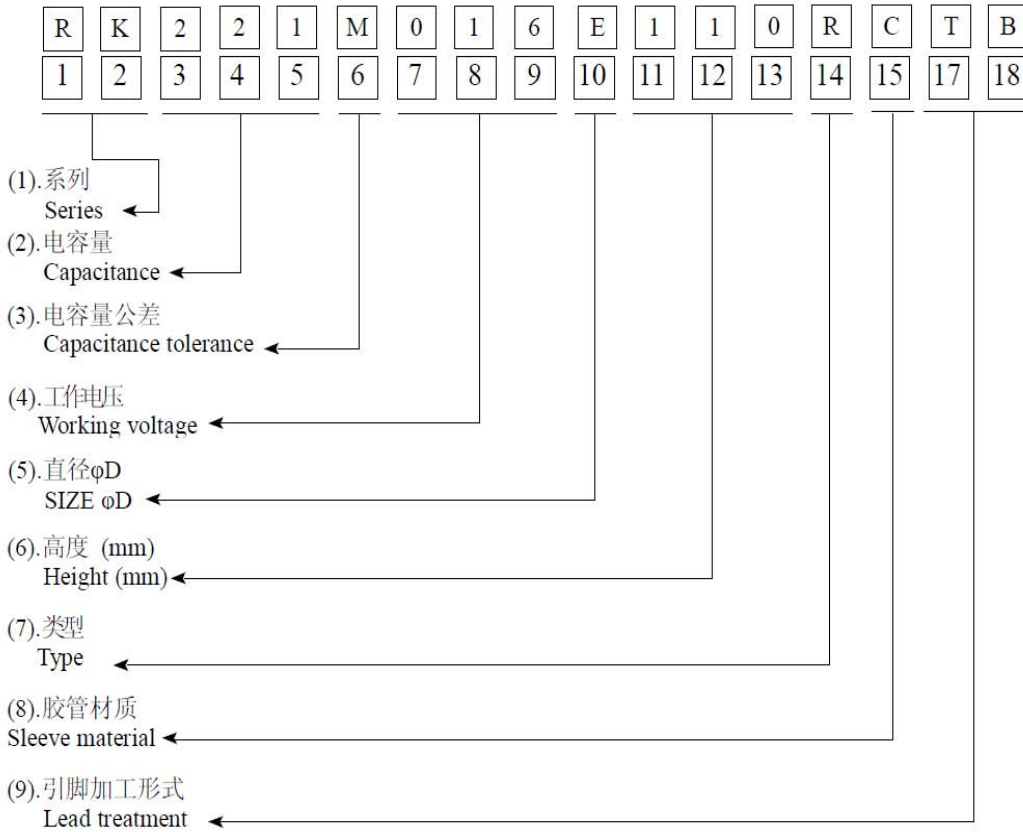
CD	5	6.3	8	10	13	16	18	22
F ± 0.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10
dΦ	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8
α	1.5						2	





料号编码原则

Expected number of coding



- (1) 系列 (Series)
详细请参考第3页。(For the details, please refer to“List of the Products” on page 3)
- (2) 电容量 (Capacitance)
电容量用微法表示(uF) { Capacitance is shown in microfarads (uF) }

uF	0.1	0.22	1	4.7	10	22	100	1000	1500	4700	10000
代码(Code)	0R1	R22	010	4R7	100	220	101	102	152	472	103

- (3) 电容量公差 (Capacitance tolerance)

公差 (Tolerance) %	±5	±10	±20	±30	-10to+30	-10to+50	-10to+20	-10to+100	0 ~ +20	0 ~ -30	±15
代码(Code)	H	K	M	N	Q	T	V	W	Z	U	S
公差 (Tolerance) %	0 ~ +30	0 ~ +40	0 ~ +50	-5to+20	-8to+5	+5to+20	0to-20	-15to+20	-25to+85	-50to0	-5to+30
代码(Code)	Y	X	A	J	E	I	B	P	L	O	C

- (4) 工作电压 (WV) { Working voltage (W.V) }

电压 (Voltage)(WV)	2.5	4	6.3	10	16	25	35	100	160	200	450
代码(Code)	2R5	004	6R3	010	016	025	035	100	160	200	450





(5) 直径 (Case) (ϕ)

直径(Diameter)	3	4	5	6.3	8	10	12	13	16	18	20	22	25	30	35	40	45	51	63.5	72	89	100
代码(Code)	A	B	C	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W

(6) 高度(Height)(L:mm)

高度(Descriptin)	5	5.5	5.8	7	7.7	9	10	10.5	11	12	16	20	21	25.5	31	35	35.5	36	40	45	76	120
代码(Code)	050	055	058	070	077	090	100	105	110	120	160	200	210	255	310	350	355	360	400	450	760	120

(7) 类型 (Type)

类型(Type)	导针型	导箔型	螺丝型	SMD 贴片	固态电容
代码(Code)	R(Radial)	S(Snap_in)	S(Screw)	V (Vichp)	P(Polymer)

(8) 胶管材质 (Sleeve material)

胶管材质(Sleeve material)	PET	PVC
代码(Code)	P	C

(9) 编带(Taig Specifications)

F(mm)	5	2	2.5	3.5	7.5
代码(Code)	TA	TB	TC	TD	TE

剪脚 (Cutting&Forming Specifications)

剪脚方式 (Shear pin mode)	直脚	成型
代码(Code)	CA	CL

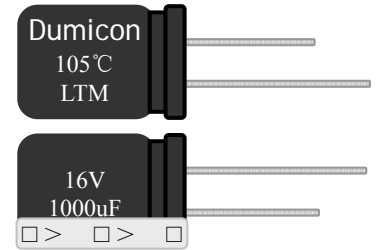
直脚散装可省略 (Straight bulk can be omitted)





LTM Series

LTM系列 低阻抗(LTM Series Low Impedance)



特性 (Features)

- ★ 高频低阻抗。(Low impedance for high frequency, Anti-Solvent Design.)
- ★ 105°C 2000~5000小时寿命。(Long Life 2000~3000 hrs at 105°C depending on case size.)
- ★ 适用于开关电源。(Radial type for switching power supply.)
- ★ 对于详细规格, 请参阅附页 (For detail specifications, please refer to the attached)
- ★ 符合RoHS(RoHS Compliant)

规格 (Specifications)

项目 (Item)	性能特点 (Performance Characteristics)																																				
使用温度范围 (Operating Temperature Range)	-55 ~ +105°C																																				
额定工作电压 (Rated Voltage Range)	6.3 ~ 100VDC																																				
静电容量范围 (Capacitance Range)	0.47 ~ 15000 uf																																				
电容公差 (Capacitance Tolerance)	±20% (120HZ +20°C)																																				
漏电流 (Leakage Current) 最高温度+20°C	I≤0.01CV 或3(uA) 经过2分钟的额定电压 I≤0.01CV or 3(uA) After 2 minutes with rated working voltage applied																																				
损耗角正切 (Dissipation Factor) (tanδ) 120HZ +20°C	下表中的比值以下 (%) Less than the value under table (%) <table border="1"> <tr> <td>WV</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>DF(%)max</td> <td>20</td> <td>18</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>9</td> <td>8</td> </tr> </table> 当容量大于1000uF时, 每增加1000uF, DF增加2%。(For capacitance ×1000 uF, add 2% per another 1000 uF)	WV	6.3	10	16	25	35	50	63	100	DF(%)max	20	18	16	14	12	10	9	8																		
WV	6.3	10	16	25	35	50	63	100																													
DF(%)max	20	18	16	14	12	10	9	8																													
低温特性 (在120HZ) Low Temperature Characteristics(at 120Hz)	最高阻抗比率 (Impedance ratio max) <table border="1"> <tr> <td>额定电压Rated voltage(VDC)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <td>Z-25°C/Z+20°C</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> <td>1.5</td> </tr> <tr> <td>Z-40°C/Z+20°C</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z-55°C/Z+20</td> <td>8</td> <td>6</td> <td>5</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table> 当容量大于1000uF时, 每增加1000uF, 增加0.5, 在-25°C/+20°C时, 当容量大于1000uF时, 每增加1000 uF, 增加1, 在-40°C/+20°C时。	额定电压Rated voltage(VDC)	6.3	10	16	25	35	50	63	100	Z-25°C/Z+20°C	4	3	2	2	1.5	1.5	1.5	1.5	Z-40°C/Z+20°C	6	4	3	3	2	2	2	2	Z-55°C/Z+20	8	6	5	5	4	4	4	4
额定电压Rated voltage(VDC)	6.3	10	16	25	35	50	63	100																													
Z-25°C/Z+20°C	4	3	2	2	1.5	1.5	1.5	1.5																													
Z-40°C/Z+20°C	6	4	3	3	2	2	2	2																													
Z-55°C/Z+20	8	6	5	5	4	4	4	4																													
高温负荷寿命 (Load Life)	测试条件 (Test conditions) 持续时间: 见右表(Duration time:as right) 环境温度: +105°C (Ambient temperature:+105°C) 施加电压: 额定直流工作电压 (Applied voltage :Rated DC working voltage) 在环境温度为+20°C时测试 (After test requirement at +20°C) 电容量变化: 小于等于初始值的±20% (Capacitance change:≤±20% of the initial value) 损耗角: 小于等于规格值的200% (Dissipation factor: ≤200% of the specified value) 漏电流: 小于等于规格值 (Leakage current :≤Not more than the specified value)																																				
高温储存特性 (Shelf Life)	测试条件 (Test conditions) 持续时间: 1000Hrs(Duration time :1000 Hrs) 环境温度: +105°C (Ambient temperature:+105°C) 施加电压: 无 (Applied voltage:None) 在环境温度为+20°C时测试: 等同于高温负载寿命 (After test requirement at +20°C:Same limits as Load life) 测量前请先用工作直流电压充电30分钟。(Pre-treatment for measurements shall be conducted after application of DC working voltage for 30 minutes)																																				

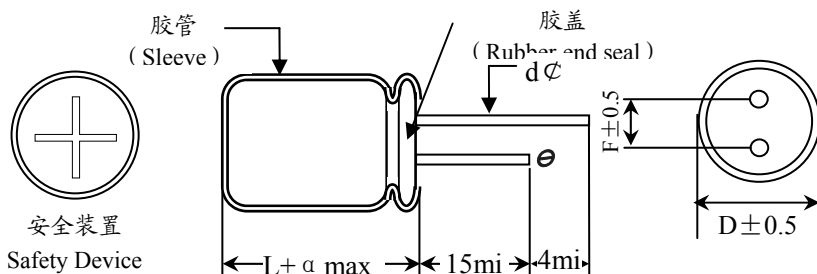
DC	Life hours
5-6.3 C	2000
8	3000
≥10	5000

纹波电流的频率系数 (Frequency Coefficient for Ripple Current)

容量 (uf) \ 频率 (HZ) CAP(uf) \ F frequency(HZ)	50(60)	120	400	1K	10K	50K-100K
CAP ≤ 10	0.47	0.59	0.76	0.85	0.97	1
10 < CAP ≤ 100	0.52	0.65	0.8	0.89	0.97	1
100 < CAP ≤ 1000	0.58	0.72	0.84	0.9	0.98	1
1000 < CAP	0.63	0.78	0.87	0.91	0.98	1



尺寸图: (单位: mm) (Diagram of Dimensions:(unit:mm))



CD	5	6.3	8	10	13	16	18
F ± 0.5	2.0	2.5	3.5	5.0	5.0	7.5	7.5
dφ	0.5	0.5	0.5	0.6	0.6	0.8	0.8
α	1.5						2

LTM Series

规格尺寸 (Case Size)

∅ DxL(mm)

WV(V) Cap(uf)	6.3 (8)			10 (13)			16 (20)			25 (32)		
	Size	Ripple	Impedance	Size	Ripple	Impedance	Size	Ripple	Impedance	Size	Ripple	Impedance
10							5x11	37	4.0	5x11	56	2.1
15							5x11	60	3.52	5x11	97	1.95
22				5x11	56	2.6	5x11	70	2.5	5x11	120	1.8
27				5x11	57	2.4	5x11	110	1.8	5x11	130	1.65
33				5x11	58	2.2	5x11	130	1.6	5x11	150	1.42
39				5x11	95	2.0	5x11	150	1.4	5x11	170	1.2
47	5x11	117	1.9	5x11	120	1.8	5x11	190	1.2	5x11	220	0.9
56	5x11	130	1.7	5x11	130	1.65	5x11	205	1.05	5x11	245	0.76
68	5x11	142	1.5	5x11	145	1.54	5x11	210	0.78	6.3x11	270	0.68
82	5x11	158	1.4	5x11	170	1.35	6.3x11	250	0.65	6.3x11	285	0.58
100	5x11	170	1.36	5x11	205	1.20	6.3x11	260	0.58	6.3x11	300	0.42
120	5x11	190	1.18	5x11	230	1.05	6.3x11	290	0.5	6.3x11	350	0.38
150	6.3x11	210	0.9	6.3x11	270	1.0	6.3x11	300	0.48	8x12	420	0.35
180	6.3x11	240	0.84	6.3x11	290	0.92	8x12	368	0.42	8x12	435	0.26
220	6.3x11	260	0.7	6.3x11	330	0.42	6.3x12	400	0.4	8x12	550	0.22
270	6.3x11	280	0.58	6.3x11	350	0.4	8x12	490	0.30	8x12	620	0.195
330	8x12	300	0.47	8x12	410	0.38	8x12	550	0.25	8x16	740	0.175
470	6.3x11 8x12	300 578	0.45 0.38	6.3x11 8x12	450 555	0.3 0.28	8x12 8x16 10x12.5	600 700 722	0.24 0.23 0.21	8x14 8x16 10x12 10x16	720 750 750 1040	0.19 0.17 0.16 0.145
560	8x12	600	0.30	8x12	620	0.13	10x12.5	780	0.2	10x16	1070	0.096
680	8x12 8x16	600 627	0.3 0.27	8x12 8x16	620 630	0.12 0.11	8x16 10x13 10x16	780 800 920	0.2 0.2 0.19	10x17 10x20	1100 1280	0.095 0.085
820	8x16	650	0.20	8x16	870	0.10	10x16	1020	0.14	10x25	1460	0.065
1000	8x12 8x16 10x12.5	600 645 660	0.2 0.19 0.17	8x16 10x12.5 10x16	980 1000 1050	0.095 0.09 0.088	8x20 10x16 10x20	1000 1080 1180	0.14 0.12 0.092	10x20 10x25	1480 1530	0.06 0.042
1200	10x16	685	0.12	10x16	1130	0.085	10x25	1370	0.085	13x25	1800	0.040
1500	10x16	964	0.11	10x16 10x20	1150 1200	0.082 0.078	10x20 10x25	1390 1470	0.08 0.068	13x25	2020	0.038
1800	10x20	1062	0.09	10x25 13x20	1280 1370	0.07 0.068	13x20	1630	0.043	13x30	2300	0.036
2200	10x20 10x25	1195	0.085 0.080	13x20	1450	0.062	13x20 13x25	1800 1950	0.036	13x25 16x25	2200 2405	0.04 0.032
2700	10x25 13x20	1195 1290	0.078 0.075	13x20	1610	0.058	13x25	2050	0.031	16x32	2670	0.027
3300	13x20	1391	0.069	13x21 13x25	1650 1880	0.055 0.038	16x25	2340	0.03	16x32	2960	0.024
4700	13x25 13x30	1875	0.052 0.047	13x25 13x30 16x25	2000 2260 2300	0.035 0.034 0.034	16x32 18x25	2650 2570	0.028 0.029	18x36	3520	0.022
6800	13x30 16x25	2076	0.027 0.025	16x32	2340	0.03	18x32	2700	0.026	18x41	3600	0.021
8200	16x32	2230	0.024	16x36	2580	0.028	18x36	2830	0.02			
10000	16x36	2404	0.022	18x32	2650	0.022	18x41	3300	0.018			
15000	18x32	2850	0.02	18x32	2730							

纹波电流 (mA), 在105°C 100KHZ (Ripple Current (mA, rms) at 100kHz)
最大阻抗 (Ω) 在20°C 100KHZ (Max Impedance (Ω) at 20°C 100KHz)



LTM Series

规格尺寸 (Case Size)

C DxD(mm)

WV(V) Cap(uf)	35 (44)			50 (63)			63 (79)		
	Size	Ripple	Impedance	Size	Ripple	Impedance	Size	Ripple	Impedance
0.47				5x11	15	5.0	5x11	16	5
1				5x11	25	3.95	5x11	27	4.1
2.2				5x11	33	3.80	5x11	38	3.80
3.3				5x11	45	3.4	5x11	48	3.4
4.7				5x11	58	2.6	5x11	62	2.6
5.6				5x11	80	2.35	5x11	85	2.3
6.8				5x11	85	2.3	5x11	90	2.2
8.2				5x11	90	2.2	5x11	100	2.1
10	5x11	70	1.9	5x11	100	2.1	5x11	105	1.9
15	5x11	115	1.72	5x11	110	1.92	5x11	110	1.75
22	5x11	130	1.5	5x11 6.3x11	120 135	1.9 1.84	6.3x11	170	1.62
27	5x11	140	1.36	6.3x11	160	1.72	6.3x11	190	1.47
33	5x11	175	1.2	6.3x11	230	1.7	8x12	245	0.8
39	6.3x11	200	1.05	6.3x11	240	1.53	8x12	270	0.75
47	5x11 6.3x11	220 250	1.03 1.0	6.3x11 8x12	220 285	1.55 1.0	8x12	290	0.61
56	6.3x11	270	0.92	8x12	300	0.93	8x12	320	0.58
68	6.3x11	300	0.74	8x12	340	0.74	8x16	480	0.56
82	8x12	350	0.54	8x12	400	0.65	8x16	510	0.38
100	6.3x12 8x12	360 380	0.52 0.43	8x16	475	0.5	10x16	590	0.3
120	8x12	460	0.35	8x16	520	0.39	10x16	660	0.28
150	8x16	580	0.29	10x16	675	0.3	10x20	790	0.24
180	8x16	630	0.25	10x16	760	0.25	10x20	850	0.16
220	8x16 10x12	700 720	0.24 0.23	10x20	900	0.18	10x20 10x25	980 1020	0.15 0.11
270	10x16	840	0.16	10x20	950	0.17	13x20	1054	0.095
330	8x16 10x16	900 995	0.15 0.12	10x25	1050	0.13	10x20 13x25	1050 1100	0.09 0.082
470	10x16 10x20	1000 1150	0.11 0.095	13x20	1490	0.095	13x21 16x25	1080 1200	0.088 0.080
560	10x25	1310	0.072	13x20	1550	0.085	16x25	1160	0.072
680	10x20 13x20	1320 1440	0.07 0.065	13x25	1840	0.075	16x32	1750	0.064
820	13x20	1600	0.06	13x30	2060	0.068	16x32	1830	0.048
1000	16x25	1950	0.055	10x40 16x32	1830 2130	0.062 0.048	16x36	2070	0.044
1200	16x25	2200	0.048	16x32	2520	0.045	18x32	2100	0.040
1500	16x32	2520	0.045	16x36	2700	0.041	18x36	2450	0.035
1800	16x32	2560	0.043	18x32	2800	0.036	18x41	2500	0.031
2200	16x25 16x32	2255 2650	0.050 0.038	18x32 18x36	2800 2900	0.035 0.033	18x41	2700	0.026
2700	18x32	2660	0.036	18x41	2970	0.027			
3300	18x36	3000	0.027						
4700	18x41	3300	0.026						

纹波电流 (mA), 在105℃ 100KHZ (Ripple Current (mA, rms) at 105℃ 100kHz)
最大阻抗 (Ω) 在20℃ 100KHz(Max Impedance (Ω) at 20℃ 100KHz)



LTM Series

规格尺寸 (Case Size)

∅ DxL(mm)

WV(V) Cap(uf)	80 (105)			100 (125)		
	Size	Ripple	Impedance	Size	Ripple	Impedance
0.47	5x11	18	5.9	5x11	20	6.0
1	5x11	26	4.4	5x11	30	4.6
2.2	5x11	31	3.4	5x11	40	3.6
3.3	5x11	40	3.0	5x11	52	3.1
4.7	5x11	58	2.8	5x11	70	3.0
5.6	5x11	72	2.6	5x11	98	2.8
6.8	6.3x11	90	2.0	6.3x11	110	2.12
10	6.3x11	105	1.8	6.3x11	125	2.0
22	8x12	120	1.0	8x12	200	1.2
33	10x12	200	0.9	10x12	310	1.1
47	10x12	230	0.8	8x14 10x12	310 340	1.0 0.89
56	10x12	260	0.75	10x12 10x16	380 410	0.78 0.77
68	10x16	290	0.4	10x16	430	0.43
100	10x20	360	0.36	10x20 10x25	460 520	0.40 0.38
120	10x25	480	0.28	10x25	620	0.3
150	10x25	510	0.18	13x21	730	0.2
180	13x21	580	0.16	13x21	800	0.18
220	13x21	600	0.13	13x25	910	0.15
270	13x26	720	0.11	16x26	1080	0.13
330	13x26	730	0.086	16x26	1200	0.093
470	16x26	800	0.08	16x26 16x32	1400 1510	0.090 0.089
560	16x26	910	0.078	16x36	1620	0.088
680	18x26	1060	0.076	16x36	1680	0.084
820	18x32	1200	0.074	18x36	1740	0.078
1000	18x36	1400	0.072	18x41	1820	0.072

纹波电流 (mA), 在105°C 100KHZ (Ripple Current (mA) at 105°C 100kHz)
最大阻抗 (Ω) 在20°C 100KHZ (Max Impedance (Ω) at 20°C 100kHz)

