

TZV 系列  
SERIES

对应无铅焊接 105℃低阻抗品  
105℃ Low Impedance, Lead Free Reflow Soldering

◆ 特 长 / FEATURES

- 105℃、2000小时品。  
Load Life : 105℃ 2000 hours.
- 可以进行无铅回流焊接。  
Lead free reflow soldering is available.
- 适用于高密度贴片安装。  
Available for high density mounting.
- 高频阻抗规格设定。  
Prescribe Impedance value at 100 kHz.

- RoHS指令对应品。  
RoHS compliance.



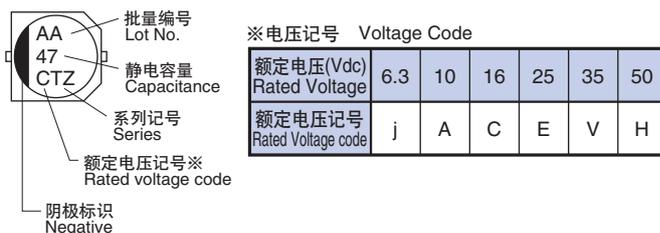
◆ 规格表 / SPECIFICATIONS

项 目 Items	特 性 Characteristics																																
工作温度范围 Category Temperature Range	-55 ~ +105℃																																
额定电压范围 Rated Voltage Range	6.3 ~ 50Vdc																																
静电容量允许差 Capacitance Tolerance	±20% (20℃, 120Hz)																																
漏 电 流 Leakage Current(MAX)	小于 $I=0.01CV$ 和 $3\mu A$ 中的较大值 (施加额定电压2分钟后) $I=0.01CV$ or $3\mu A$ whichever is greater. (After 2 minutes application of rated voltage) $I$ = 漏损电流 ( $\mu A$ ) $C$ = 静电容量 ( $\mu F$ ) $V$ = 额定电压 (Vdc) Leakage Current                      Capacitance                      Rated Voltage																																
损失角正切值 ( $\tan \delta$ ) Dissipation Factor(MAX)	<table border="1"> <tr> <td>额定电压 (Vdc) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>(20℃, 120Hz)</td> </tr> <tr> <td><math>\tan \delta</math></td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td></td> </tr> </table>	额定电压 (Vdc) Rated Voltage	6.3	10	16	25	35	50	(20℃, 120Hz)	$\tan \delta$	0.26	0.19	0.16	0.14	0.12	0.10																	
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耐 久 性 Endurance	在105℃环境中, 不超过额定电压的范围内叠加额定纹波电流, 连续加载2000小时后, 满足以下各项要求。 After applying rated voltage with rated ripple current for 2000 hours at 105℃, the capacitors shall meet the following requirements. <table border="1"> <tr> <td>静电容量变化率 Capacitance Change</td> <td>初期值的±30%以内 Within ±30% of the initial value.</td> </tr> <tr> <td>损失角正切值 Dissipation Factor</td> <td>规格值的200%以下 Not more than 200% of the specified value.</td> </tr> <tr> <td>漏 电 流 Leakage Current</td> <td>规格值以下 Not more than the specified value.</td> </tr> </table>	静电容量变化率 Capacitance Change	初期值的±30%以内 Within ±30% of the initial value.	损失角正切值 Dissipation Factor	规格值的200%以下 Not more than 200% of the specified value.	漏 电 流 Leakage Current	规格值以下 Not more than the specified value.																										
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低 温 特 性 Low Temperature Stability (阻抗比) Impedance Ratio(MAX)	<table border="1"> <tr> <td>额定电压 (Vdc) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>(120Hz)</td> </tr> <tr> <td><math>Z(-25^\circ C)/Z(20^\circ C)</math></td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td><math>Z(-40^\circ C)/Z(20^\circ C)</math></td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td><math>Z(-55^\circ C)/Z(20^\circ C)</math></td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> </table>	额定电压 (Vdc) Rated Voltage	6.3	10	16	25	35	50	(120Hz)	$Z(-25^\circ C)/Z(20^\circ C)$	2	2	2	2	2	2		$Z(-40^\circ C)/Z(20^\circ C)$	3	3	3	3	3	3		$Z(-55^\circ C)/Z(20^\circ C)$	4	4	4	3	3	3	
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◆ 纹波电流修正系数 /  
MULTIPLIER FOR RIPPLE CURRENT

频率 (Hz) Frequency		120	1k	10k	100k≤
系 数 Coefficient	4.7 $\mu F$	0.30	0.60	0.80	1.00
	10 ~ 47 $\mu F$	0.32	0.75	0.90	1.00
	100 $\mu F$	0.50	0.80	0.95	1.00
	220 ~ 1000 $\mu F$	0.60	0.85	0.95	1.00

◆ 标 识 / MARKING

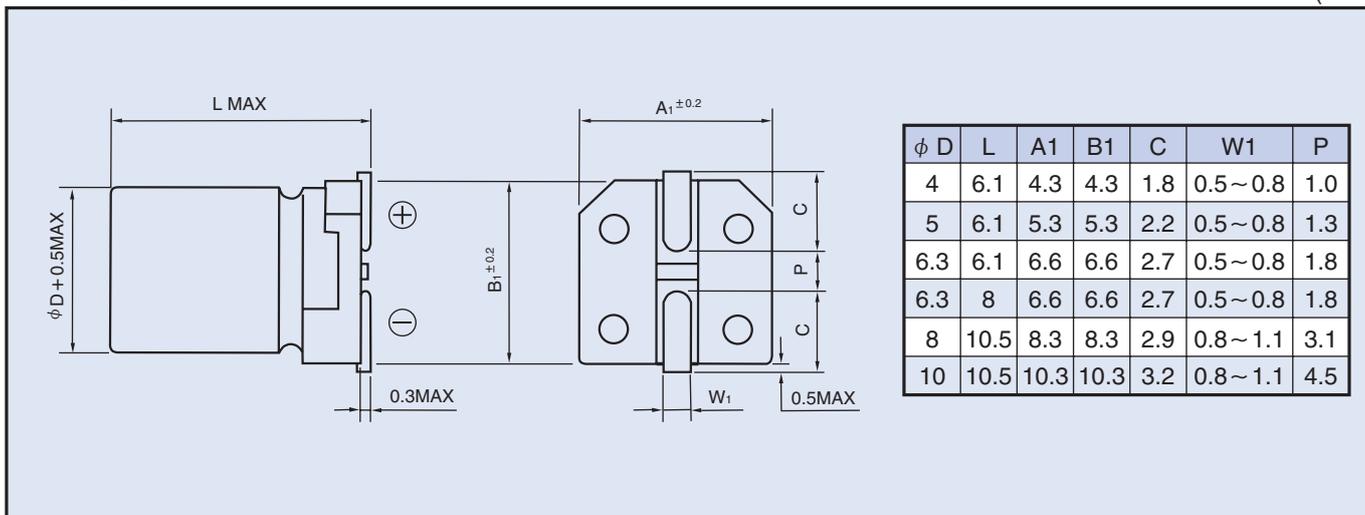


◆ 产品型号体系 / PART NUMBER

□□□	TZV	□□□□□	M	□□□	D×L
额定电压 Rated Voltage	系列名称 Series	静电容量 Capacitance	静电容量允许差 Capacitance Tolerance	副记号 Option	铝壳尺寸 Case Size

◆尺寸图 / DIMENSIONS

(mm)



◆标准品一览表 / STANDARD SIZE

Size φ D × L (mm), Rated Ripple Current (mA r.m.s./105°C, 100kHz), Impedance (Ω MAX/20°C, 100kHz)

Vdc	Cap (μF)	Size (φDXL)	Ripple	Impedance	Vdc	Cap (μF)	Size (φDXL)	Ripple	Impedance
6.3	22	4 × 6.1	90	1.35	25	33	5 × 6.1	170	0.70
	47	4 × 6.1	90	1.35			6.3 × 6.1	250	0.36
		100	5 × 6.1	170		0.70	47	6.3 × 6.1	250
	220		5 × 6.1	170		0.70	100	6.3 × 8	300
		330	6.3 × 6.1	250		0.36	220	8 × 10.5	600
	1000		6.3 × 6.1	250		0.36	330	8 × 10.5	600
		330	6.3 × 8	300		0.34	470	10 × 10.5	850
	10		33	4 × 6.1		90	1.35	35	4.7
220		6.3 × 8	300	0.34	10	4 × 6.1	90		1.45
		470	8 × 10.5	600		0.16	5 × 6.1		170
680			8 × 10.5	600	0.16	22	5 × 6.1		170
		1000	10 × 10.5	850	0.08		6.3 × 6.1		250
16	10	4 × 6.1	90	1.35	47	6.3 × 6.1	250		0.36
		22	4 × 6.1	90		1.35	6.3 × 8		300
	33		5 × 6.1	170	0.70	100	6.3 × 8		300
		47	5 × 6.1	170	0.70		8 × 10.5		600
	100		6.3 × 6.1	250	0.36	220	8 × 10.5		600
		220	6.3 × 6.1	250	0.36	330	10 × 10.5	850	0.09
	330		6.3 × 8	300	0.34	50	4.7	4 × 6.1	60
		470	8 × 10.5	600	0.16		10	5 × 6.1	85
	680		8 × 10.5	600	0.16			6.3 × 6.1	165
		1000	10 × 10.5	850	0.08		22	6.3 × 6.1	165
1000	10 × 10.5		850	0.08	33		6.3 × 8	195	0.68
	1000	10 × 10.5	850	0.08	47		6.3 × 8	195	0.68
1000		10 × 10.5	850	0.08	100		8 × 10.5	350	0.34
	1000	10 × 10.5	850	0.08	220		10 × 10.5	670	0.18