



# 贴片型铝电解电容器

## CHIP ALUMINUM ELECTROLYTIC CAPACITORS

TLV

**TLV** 系列  
SERIES

对应无铅焊接105℃低阻抗长寿命品  
105℃ Long Life, Low Impedance, Lead Free Reflow Soldering.

### ◆ 特 长 / FEATURES

- 105℃、5000小时品。  
Load Life 105℃ 5000 hours.
- 可以进行回流焊接。  
Reflow soldering is available.
- 大型贴片安装品。  
Large can-size SMD.
- 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 ~ 35V.DC																												
静电容量允许差 Capacitance Tolerance	±20% (20℃, 120Hz)																												
漏 电 流 Leakage Current(MAX)	小于I=0.01CV和3μA中的较大值 (施加额定电压2分钟后) I=0.01CV or 3μA whichever is greater. (After 2 minutes application of rated voltage) I = 漏电流 (μA) Leakage Current      C = 额定静电容量 (μF) Rated Capacitance      V = 额定电压 (V) Rated Voltage																												
损失角正切值(tan δ) Dissipation Factor(MAX)	<table border="1"> <tr> <td>额定电压 (V) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(20℃, 120Hz)</td> </tr> <tr> <td>tan δ</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </table> <p>对于额定静电容量超过1000μF的产品, 其静电容量每增加1000μF, 则损失角正切值在上表值的基础上加上0.02。 When rated capacitance is over 1000μF, tan δ shall be added 0.02 to the listed value with Increase of every 1000 μF.</p>	额定电压 (V) Rated Voltage	6.3	10	16	25	35	(20℃, 120Hz)	tan δ	0.26	0.19	0.16	0.14	0.12															
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耐 久 性 Endurance	<p>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5000小时后, 满足以下各项要求。 After applying rated voltage with rated ripple current for 5000 hours at 105℃, the capacitors shall Meet the following requirements.</p> <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 initially measured value.</td> </tr> <tr> <td>损 失 角 正 切 值 Dissipation Factor</td> <td>规格值的200%以下 (φ8, φ10 : 300%) 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 initially measured value.	损 失 角 正 切 值 Dissipation Factor	规格值的200%以下 (φ8, φ10 : 300%) 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 (V) Rated Voltage</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25℃)/Z(20℃)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40℃)/Z(20℃)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td>Z(-55℃)/Z(20℃)</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td></td> </tr> </table>	额定电压 (V) Rated Voltage	6.3	10	16	25	35	(120Hz)	Z(-25℃)/Z(20℃)	2	2	2	2	2		Z(-40℃)/Z(20℃)	3	3	3	3	3		Z(-55℃)/Z(20℃)	4	4	4	3	3	
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Z(-55℃)/Z(20℃)	4	4	4	3	3																								

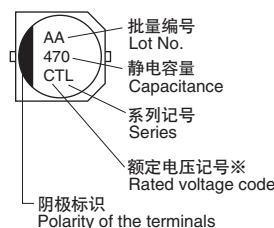
### ◆ 纹波电流修正系数 / MULTIPLIER FOR RIPPLE CURRENT

频率系数 Frequency Coefficient

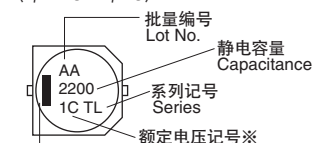
频率 (Hz) Frequency	120	1K	10K	100K ≤
100 ~ 150μF	0.50	0.80	0.95	1.00
220 ~ 10000μF	0.60	0.85	0.95	1.00

### ◆ 标 识 / MARKING

(φ8, φ10)



(φ12.5 ~ φ18)



阴极标识 Polarity of the terminals

※额定电压 Voltage code

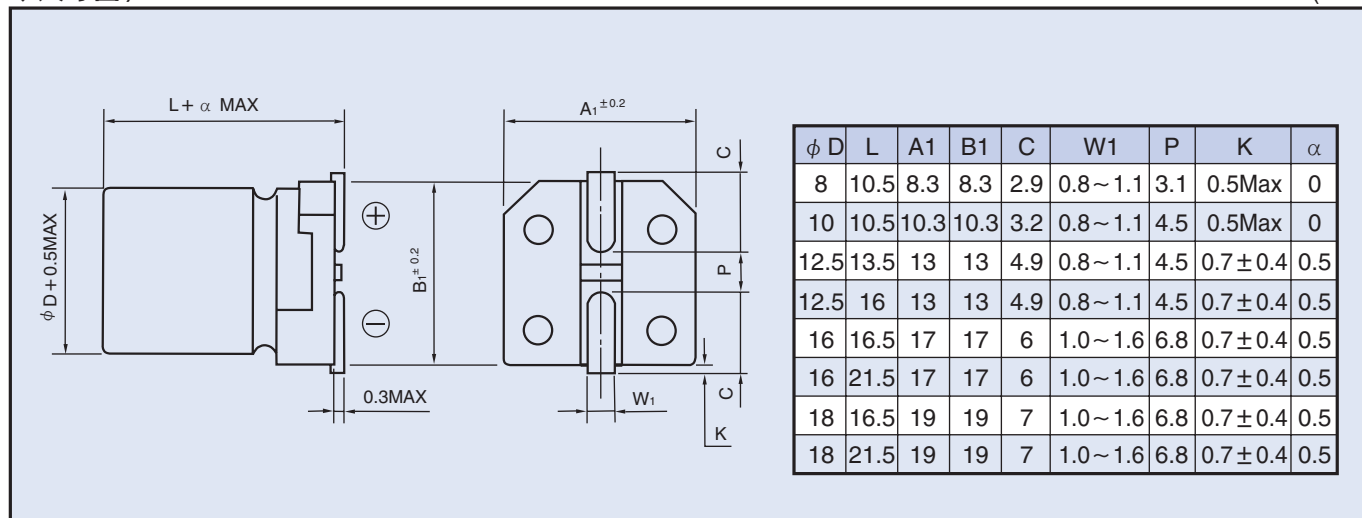
额定电压 (V) Rated Voltage	6.3	10	16	25	35
φD ≤ 10	j	A	C	E	V
φD ≥ 12.5	0J	1A	1C	1E	1V

### ◆ 产品型号体系 / PART NUMBER

□□□	TLV	□□□□□	M	□□□	D × L
额定电压 Rated Voltage	系列名称 Series	额定静电容量 Rated 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  $\phi$  D×L(mm), Ripple Current (mA r.m.s./105°C, 100kHz), Impedance( $\Omega$  MAX/20°C, 100kHz)

WV (V.DC)	Cap ( $\mu$ F)	Size ( $\phi$ DXL)	Ripple	Impedance	WV (V.DC)	Cap ( $\mu$ F)	Size ( $\phi$ DXL)	Ripple	Impedance
6.3 (0J)	2200	12.5×13.5	1100	0.065	25 (1E)	220	8×10.5	600	0.16
	3300	12.5×16	1400	0.055		330	8×10.5	600	0.16
	4700	16×16.5	1800	0.045		470	10×10.5	850	0.08
	6800	16×21.5	2330	0.029		1000	12.5×13.5	1100	0.065
	10000	18×21.5	2640	0.028		1500	16×16.5	1800	0.045
10 (1A)	1000	10×10.5	850	0.08		2200	18×16.5	2060	0.044
	2200	12.5×16	1400	0.055		3300	18×21.5	2640	0.028
	3300	16×16.5	1800	0.045		35 (1V)	100	8×10.5	600
	4700	18×16.5	2060	0.044	100		10×10.5	850	0.08
	6800	18×21.5	2640	0.028	150		8×10.5	600	0.16
16 (1C)	470	8×10.5	600	0.16	220		8×10.5	600	0.16
	680	10×10.5	850	0.08	330		10×10.5	850	0.08
	1500	12.5×13.5	1100	0.065	470		12.5×13.5	1100	0.065
	2200	16×16.5	1800	0.045	680		12.5×13.5	1100	0.065
	3300	18×16.5	2060	0.044	1000		16×16.5	1800	0.045
	4700	16×21.5	2330	0.029	1500		18×16.5	2060	0.044
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