

TLV SERIES
105°C Long Life, Low Impedance, Lead Free Reflow Soldering.
◆FEATURES

- Load Life 105°C 5000 hours.
- Lead free Reflow soldering is available.
- Large can-size SMD.
- Prescribe Impedance value at 100kHz.
- RoHS compliance.


◆SPECIFICATIONS

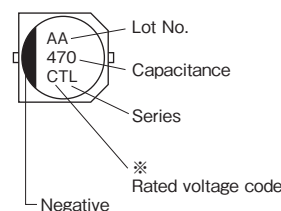
Items	Characteristics																												
Category Temperature Range	-55~+105°C																												
Rated Voltage Range	6.3~35V.DC																												
Capacitance Tolerance	±20% (20°C, 120Hz)																												
Leakage Current(MAX)	I=0.01CV or 3μA whichever is greater.(After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance (μF) V=Rated Voltage(V)																												
Dissipation Factor(MAX) (tanδ)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>(20°C, 120Hz)</th> </tr> </thead> <tbody> <tr> <td>tanδ</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </tbody> </table> <p>When rated capacitance is over 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF.</p>	Rated Voltage (V)	6.3	10	16	25	35	(20°C, 120Hz)	tanδ	0.26	0.19	0.16	0.14	0.12															
Rated Voltage (V)	6.3	10	16	25	35	(20°C, 120Hz)																							
tanδ	0.26	0.19	0.16	0.14	0.12																								
Endurance	<p>After applying rated voltage for 5000 hours at 105°C, the capacitor shall meet the following requirements.</p> <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±30% of the initially measured value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table>	Capacitance Change	Within ±30% of the initially measured value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.																						
Capacitance Change	Within ±30% of the initially measured value.																												
Dissipation Factor	Not more than 200% of the specified value.																												
Leakage Current	Not more than the specified value.																												
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>(120Hz)</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td></td> </tr> <tr> <td>Z(-55°C)/Z(20°C)</td> <td>4</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td></td> </tr> </tbody> </table>	Rated Voltage (V)	6.3	10	16	25	35	(120Hz)	Z(-25°C)/Z(20°C)	2	2	2	2	2		Z(-40°C)/Z(20°C)	3	3	3	3	3		Z(-55°C)/Z(20°C)	4	4	4	3	3	
Rated Voltage (V)	6.3	10	16	25	35	(120Hz)																							
Z(-25°C)/Z(20°C)	2	2	2	2	2																								
Z(-40°C)/Z(20°C)	3	3	3	3	3																								
Z(-55°C)/Z(20°C)	4	4	4	3	3																								

◆MULTIPLIER FOR RIPPLE CURRENT

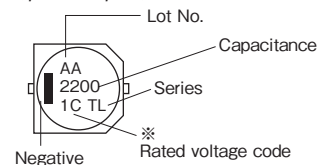
Frequency (Hz)		120	1k	10k	100k≤
Coefficient	100~150μF	0.50	0.80	0.95	1.00
	220~10000μF	0.60	0.85	0.95	1.00

◆MARKING

(φ8, φ10)



(φ12.5~φ18)



※ Voltage code

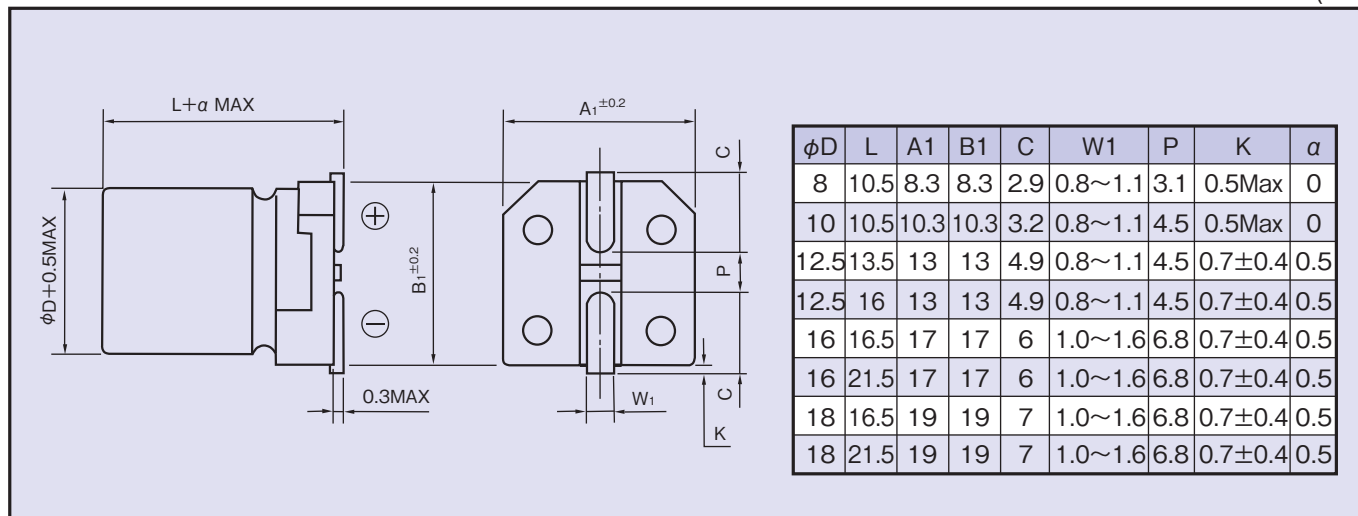
Rated Voltage (V)	6.3	10	16	25	35
φD≤10	j	A	C	E	V
φD≥12.5	0J	1A	1C	1E	1V

◆PART NUMBER

□□□	TLV	□□□□□	M	□□□	D×L
Rated Voltage	Series	Capacitance	Capacitance Tolerance	Option	Case Size

◆ DIMENSIONS

(mm)


◆ STANDARD SIZE

Size φDXL(mm), Ripple current(mA r.m.s./105°C, 100kHz), Impedance(Ω MAX/20°C, 100kHz)

V.DC	Cap (μF)	Size (φDXL)	Ripple	Impedance	V.DC	Cap (μF)	Size (φDXL)	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	0.16
	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	
					2200	16×21.5	2330	0.029		