

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

- Load Life 105°C 5000 hours.
- Reflow soldering is available.
- Large can-size SMD.
- 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) I=(μA) Leakage Current C=(μF) Rated Capacitance V=(V) Rated Voltage																								
(tanδ) Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> </tr> </thead> <tbody> <tr> <td>(20°C, 120Hz)</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</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 1000 μF.</p>	Rated Voltage	6.3	10	16	25	35	(20°C, 120Hz)	0.26	0.19	0.16	0.14	0.12												
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Endurance	<p>After applying rated voltage with rated ripple current for 5000 hours at 105°C, the capacitors 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.																		
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Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</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> </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> </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> </tr> </tbody> </table> <p>(120Hz)</p>	Rated Voltage	6.3	10	16	25	35	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
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Z(-40°C)/Z(20°C)	3	3	3	3	3																				
Z(-55°C)/Z(20°C)	4	4	4	3	3																				

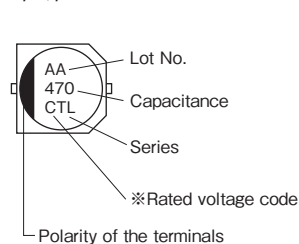
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency Coefficient

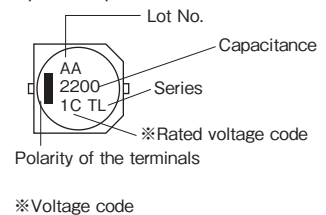
(Hz) Frequency		120	1K	10K	100K≤
Coefficient	100~150μF	0.50	0.80	0.95	1.00
	220~10000μF	0.60	0.85	0.95	1.00

◆MARKING

(φ8, φ10)



(φ12.5~φ18)

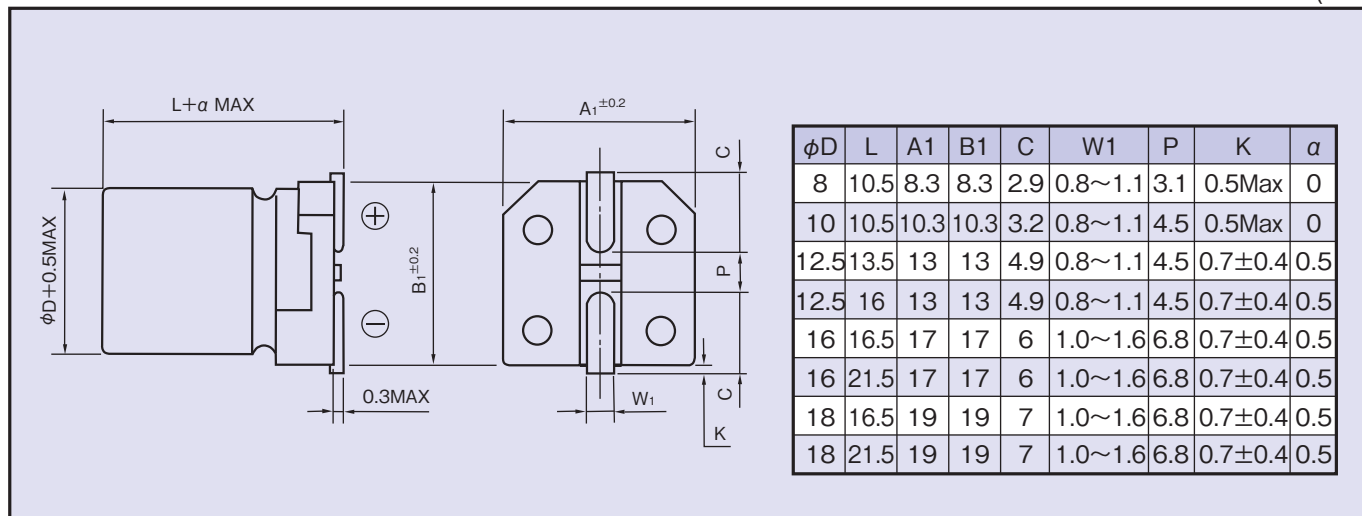

◆PART NUMBER

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

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

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE

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

WV (V.DC)	Cap (μF)	Size (φDXL)	Ripple	Impedance	WV (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
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