

TLV SERIES
NEW

105°C Long Life, Low Impedance, Lead Free Reflow Soldering.

FEATURES

- Load Life 105°C 5000Hrs.
- Reflow soldering is available.
- Large can-size SMD.
- RoHS compliance.


SPECIFICATIONS

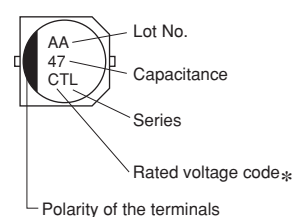
Items	Characteristics																													
Category Temperature Range	-55~+105℃																													
Rated Voltage Range	6.3~35V.DC																													
Capacitance Tolerance	±20% (20℃, 120Hz)																													
Leakage Current(MAX)	I=0.01CV or 3 μA whichever is greater. (After 2 minutes) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)																													
(tanδ) Dissipation Factor(MAX)	<table><tr><td>Rated Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</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></tr></table>	Rated Voltage (V)	6.3	10	16	25	35	tan δ	0.26	0.19	0.16	0.14	0.12	When rated capacitance is over 1000 μF, tanδ shall be added 0.02 to the listed value with Increase of over 1000 μF.																
Rated Voltage (V)	6.3	10	16	25	35																									
tan δ	0.26	0.19	0.16	0.14	0.12																									
Endurance	After applying rated voltage with rated ripple current for 5000 hrs at 105℃, the capacitors shall Meet the following requirements. <table><tr><td>Capacitance Change</td><td colspan="5">Within ±30% of the initial value.</td></tr><tr><td>Dissipation Factor</td><td colspan="5">Not more than 200% of the specified value. (φ 8.φ 10 : 300%)</td></tr><tr><td>Leakage Current</td><td colspan="5">Not more than the specified value.</td></tr></table>						Capacitance Change	Within ±30% of the initial value.					Dissipation Factor	Not more than 200% of the specified value. (φ 8.φ 10 : 300%)					Leakage Current	Not more than the specified value.										
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Low Temperature Stability Impedance Ratio(MAX)	<table><tr><td>Rated Voltage (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td></tr><tr><td>Z (-25℃)/Z (20℃)</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></tr><tr><td>Z (-40℃)/Z (20℃)</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></tr><tr><td>Z (-55℃)/Z (20℃)</td><td>4</td><td>4</td><td>4</td><td>3</td><td>3</td></tr></table>	Rated Voltage (V)	6.3	10	16	25	35	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	(120Hz)				
Rated Voltage (V)	6.3	10	16	25	35																									
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																									

MULTIPLIER FOR RIPPLE CURRENT

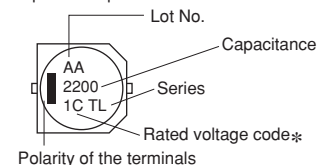
Frequency (Hz)	120	1K	10K	100K ≤
Coefficient				
47~150	0.50	0.80	0.95	1.00
220~10000	0.60	0.85	0.95	1.00

MARKING

<φ 8, φ 10>



<φ 12.5~φ 18>



*Voltage code

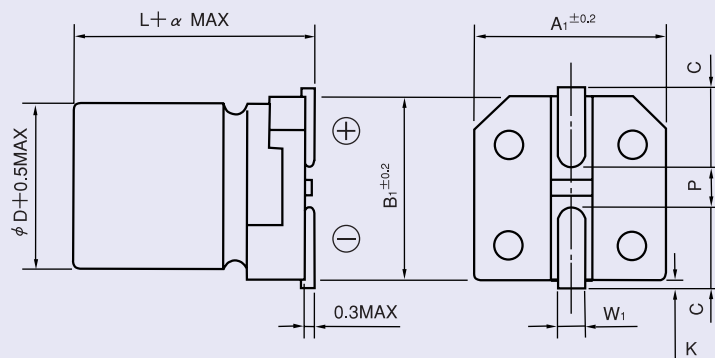
Rated Voltage (V)	6.3	10	16	25	35
φ D ≤ 10	j	A	C	E	V
φ D ≥ 12.5	0J	1A	1C	1E	1V

PART NUMBER

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

◆ DIMENSIONS

(mm)



ϕ D	L	A1	B1	C	W1	P	K	α
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1	0.5Max	0
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5	0.5Max	0
12.5	13.5	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
12.5	16	13	13	4.9	0.8~1.1	4.5	0.7±0.4	0.5
16	16.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
16	21.5	17	17	6	1.0~1.6	6.8	0.7±0.4	0.5
18	16.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5
18	21.5	19	19	7	1.0~1.6	6.8	0.7±0.4	0.5

◆ STANDARD SIZE

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

WV (V.DC)	Cap (μ F)	Size (ϕ DXL)	Ripple	Z	WV (V.DC)	Cap (μ F)	Size (ϕ DXL)	Ripple	Z
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		680	12.5×13.5	1100	0.065
	2200	16×16.5	1800	0.045		1000	16×16.5	1800	0.045
	3300	18×16.5	2060	0.044		1500	18×16.5	2060	0.044
	4700	16×21.5	2330	0.029		2200	16×21.5	2330	0.029