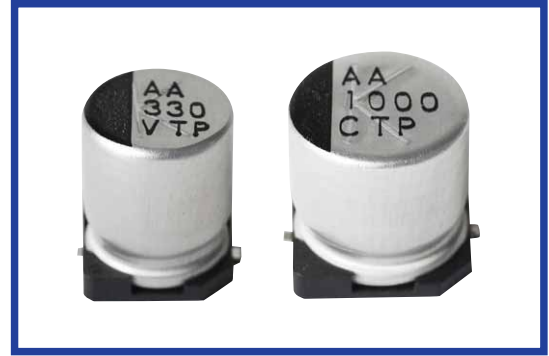


**TPV SERIES**
**105°C Low ESR, Miniaturized, Lead Free Reflow Soldering**
**◆FEATURES**

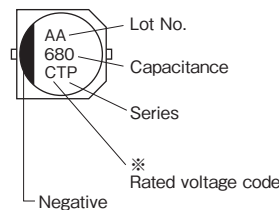
- Load Life 105°C 2000 hours.
- Lead free reflow soldering is available.
- Available for high density mounting.
- Prescribe ESR value at 100 kHz.
- RoHS compliance.


**◆SPECIFICATIONS**

Items	Characteristics																												
Category Temperature Range	-55~+105°C																												
Rated Voltage Range	6.3~35Vdc																												
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 (Vdc)																												
(tanδ) Dissipation Factor(MAX)	<table border="1"> <tr> <td>Rated Voltage (Vdc)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(20°C, 120Hz)</td> </tr> <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> </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 (Vdc)	6.3	10	16	25	35	(20°C, 120Hz)	tanδ	0.26	0.19	0.16	0.14	0.12															
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tanδ	0.26	0.19	0.16	0.14	0.12																								
Endurance	<p>After applying rated voltage for 2000 hours at 105°C, the capacitor shall meet the following requirements.</p> <table border="1"> <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> </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"> <tr> <td>Rated Voltage (Vdc)</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°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> </table>	Rated Voltage (Vdc)	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 (Vdc)	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	0.60	0.80	0.95	1.00

**◆MARKING**


※Voltage code

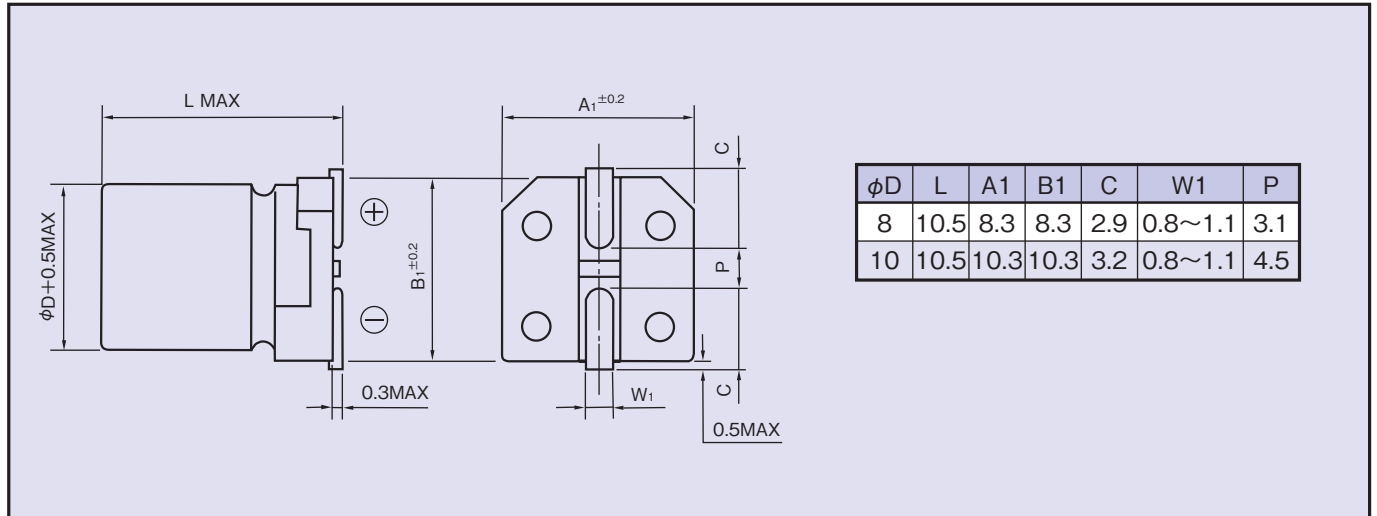
Rated Voltage (Vdc)	6.3	10	16	25	35
Voltage code	j	A	C	E	V

**◆PART NUMBER**

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

**◆ DIMENSIONS**

(mm)



**◆ STANDARD SIZE**

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

Vdc	Cap (μF)	Size (φDXL)	Ripple	ESR
6.3	1200	8×10.5	850	0.080
	2200	10×10.5	1190	0.060
10	1000	8×10.5	850	0.080
	1500	10×10.5	1190	0.060
16	680	8×10.5	850	0.080
	1000	10×10.5	1190	0.060
25	470	8×10.5	850	0.080
	820	10×10.5	1190	0.060
35	330	8×10.5	850	0.080
	560	10×10.5	1190	0.060