

TPV SERIES

NEW

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.



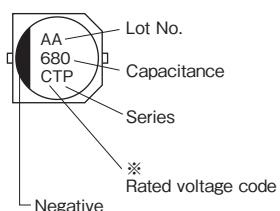
◆SPECIFICATIONS

Items	Characteristics																								
Category Temperature Range	-55~+105°C																								
Rated Voltage Range	6.3~35V.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"> <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>tanδ</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </table> <p>(20°C,120Hz)</p> <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	tanδ	0.26	0.19	0.16	0.14	0.12												
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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 (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</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> </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> </table> <p>(120Hz)</p>	Rated Voltage (V)	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(Hz)	120	1k	10k	100k≤
Coefficient	0.60	0.80	0.95	1.00

◆MARKING



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

◆PART NUMBER

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

◆DIMENSIONS

(mm)

ϕD	L	A1	B1	C	W1	P
8	10.5	8.3	8.3	2.9	0.8~1.1	3.1
10	10.5	10.3	10.3	3.2	0.8~1.1	4.5

◆STANDARD SIZE

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

V.DC	Cap (μF)	Size (ϕDXL)	Ripple	ESR
6.3 (0J)	1200	8×10.5	850	0.080
	2200	10×10.5	1190	0.060
10 (1A)	1000	8×10.5	850	0.080
	1500	10×10.5	1190	0.060
16 (1C)	680	8×10.5	850	0.080
	1000	10×10.5	1190	0.060
25 (1E)	470	8×10.5	850	0.080
	820	10×10.5	1190	0.060
35 (1V)	330	8×10.5	850	0.080
	560	10×10.5	1190	0.060