

TPV SERIES

UPGRADE

105°C Low ESR, Miniaturized

- Load Life 105°C 2000 hours.
- AEC-Q200.

RoHS
compliance

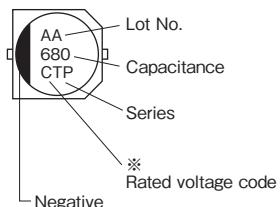
◆SPECIFICATIONS

Items	Characteristics																													
Category Temperature Range	−55~+105°C																													
Rated Voltage Range	6.3~35Vdc																													
Capacitance Tolerance	$\pm 20\%$ (20°C,120Hz)																													
Leakage Current(MAX)	I=0.01CV or $3\mu A$ whichever is greater.(After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Capacitance (μF) V=Rated Voltage(Vdc)																													
Dissipation Factor(MAX) ($\tan\delta$)	<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> </tr> <tr> <td>$\tan\delta$</td> <td>0.26</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </table> (20°C,120Hz) When rated capacitance is over 1000 μF , $\tan\delta$ shall be added 0.02 to the listed value with increase of every 1000 μF .						Rated Voltage (Vdc)	6.3	10	16	25	35	$\tan\delta$	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 $\pm 30\%$ 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 $\pm 30\%$ 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> </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> (120Hz)						Rated Voltage (Vdc)	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
Rated Voltage (Vdc)	6.3	10	16	25	35																									
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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 \leq
Coefficient	68~150 μF	0.44	0.80	0.95	1.00
	220~2200 μF	0.60	0.85	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
Rated Voltage Series □□□□□ M
Capacitance Capacitance Tolerance Option D×L
Case Size

◆DIMENSIONS

(mm)

ϕD	L	A1	B1	C	W1	P
6.3	6.1	6.6	6.6	2.7	0.5~0.8	1.8
6.3	8	6.6	6.6	2.7	0.5~0.8	1.8
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), Rated Ripple Current(mA r.m.s./105°C,100kHz), ESR(Ω MAX/20°C, 100kHz)

Vdc	Cap (μF)	Size (ϕDXL)	Ripple	ESR	Vdc	Cap (μF)	Size (ϕDXL)	Ripple	ESR
6.3	330	6.3×6.1	300	0.26	25	100	6.3×6.1	300	0.26
	470	6.3×8	600	0.16		150	6.3×8	600	0.16
	680	6.3×8	600	0.16		220	6.3×8	600	0.16
	1200	8×10.5	850	0.08		470	8×10.5	850	0.08
	2200	10×10.5	1190	0.06		820	10×10.5	1190	0.06
10	220	6.3×6.1	300	0.26	35	68	6.3×6.1	300	0.26
	330	6.3×8	600	0.16		100	6.3×6.1	300	0.26
	470	6.3×8	600	0.16		150	6.3×8	600	0.16
	1000	8×10.5	850	0.08		330	8×10.5	850	0.08
	1500	10×10.5	1190	0.06		560	10×10.5	1190	0.06
16	150	6.3×6.1	300	0.26					
	220	6.3×6.1	300	0.26					
	330	6.3×8	600	0.16					
	680	8×10.5	850	0.08					
	1000	10×10.5	1190	0.06					