

TPV RADIAL LEAD TYPE, HIGH VOLTAGE/LONG LIFE

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

Operating with wide temperature range -55~+105°C

High voltage, low ESR, high ripple current

Load life of 3000 hours

RoHS & REACH compliant, Halogen-free



SPECIFICATIONS

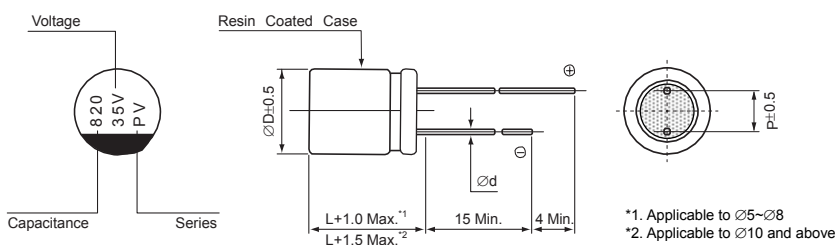
Items	Characteristics								
Operation Temperature Range	-55 ~ +105°C								
Voltage Range	16 ~ 100V								
Capacitance Range	6.8 ~ 2200μF								
Capacitance Tolerance	±20% at 120Hz, 20°C								
Leakage Current	≤Specified value (after 2 minutes application of rated voltage at 20°C).								
Dissipation Factor (tan δ)	≤Specified value at 120Hz, 20°C.								
ESR	≤Specified value at 100KHz, 20°C.								
Stability at Low Temperature	Measurement frequency : 100KHz								
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Damp Heat (Steady State)	When the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90% RH, they meet the characteristics listed below.								
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Endurance	After 3000 hours application of the rated voltage at 105°C, they meet the characteristics listed below.								
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Resistance to Soldering Heat <small>(Please refer page 9 for soldering conditions)</small>	After reflow soldering and restored at room temperature, they meet the characteristics listed below.								
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ESR (*2)	130% or less of initial specified value								
Leakage Current	Initial specified value or less								
Marking	Red print on the case top.								

(*1) If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

(*2) Should be measured at both of the terminal ends closest to the capacitor body.

(*3) The value before test of examination of resistance to soldering.

DRAWING (Unit: mm)



CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

TPV Series

DIMENSIONS (Unit: mm)

∅D × L	5 × 8	6.3 × 6/8/9	6.3 × 12	8 × 8/9	8 × 11/12	10 × 10/12/13	10 × 16/21
P	2.0	2.5	2.5	3.5	3.5	5.0	5.0
∅d	0.5	0.6	0.6	0.6	0.6	0.6	0.6
L	8.0	6.0/8.0/9.0	12.0	8.0/9.0	11.0/12.0	10.0/12.0/13.0	16.0/21.0

DIMENSIONS & STANDARD RATINGS

WV (V) Parameter Cap. (μF)		16					20				
		Case size ∅D×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz	Case size ∅D×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz
150	157										
220	227	8 × 9	0.12	704	26	2100	8 × 12	0.12	880	25	2400
270	277	8 × 12	0.12	864	24	2500					
330	337						10 × 13	0.12	1320	24	2800
470	477	10 × 13	0.12	1504	23	2900					
680	687	10 × 13	0.12	2176	23	2900					
2200	228	10 × 21	0.12	7040	14	4800					

WV (V) Parameter Cap. (μF)		25					35				
		Case size ∅D×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz	Case size ∅D×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz
10	106										
47	476						5 × 8 (6.3 × 6)	0.12 (0.12)	329 (329)	55 (35)	1700 (1800)
56	566						8 × 9	0.12	392	29	1900
82	826						8 × 12	0.12	574	27	2300
100	107						6.3 × 8 (8 × 8)	0.12 (0.12)	700 (700)	28 (28)	2500 (2500)
120	127	8 × 9	0.12	600	28	2000					
150	157	6.3 × 9 (8 × 12)	0.12 (0.12)	750 (750)	23 (26)	3300 (2400)	10 × 13	0.12	1050	26	2700
220	227	8 × 8 (8 × 11)	0.12 (0.12)	1100 (1100)	22 (22)	2400 (2600)	8 × 11 (8 × 12)	0.12 (0.12)	1540 (1540)	16 (16)	2800 (2800)
270	277	6.3 × 12 (10 × 13)	0.12 (0.12)	1350 (1350)	27 (25)	2300 (2800)					
330	337	6.3 × 12 (10 × 10) (10 × 12)	0.12 (0.12) (0.12)	1650 (1650) (1650)	27 (22) (22)	2300 (3100) (3300)	10 × 12	0.12	2310	20	3600
470	477	8 × 12	0.12	2350	20	3300	10 × 10	0.12	3290	20	3600
560	567	8 × 12	0.12	2800	15	3400					
680	687	8 × 12 (10 × 13)	0.12 (0.12)	3400 (3400)	15 (15)	3700 (3900)	10 × 13	0.12	4760	20	3600
1000	108	10 × 16	0.12	5000	25	4500	10 × 21	0.12	7000	16	4700

WV (V) Parameter Cap. (μF)		50					63				
		Case size ∅D×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz	Case size ∅D×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz
22	226										
27	276						8 × 12	0.12	340	33	2100
33	336	8 × 9	0.12	330	32	1900					
39	396	8 × 12	0.12	390	29	2200					
47	476						10 × 13	0.12	592	29	2600
56	566						10 × 12	0.12	705	29	2600
68	686	10 × 13	0.12	680	28	2600					
180	187						10 × 12	0.12	2268	27	3400
220	227	10 × 12	0.12	2200	22	3500					
330	337						10 × 12	0.12	4158	20	4600

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

TPV Series

DIMENSIONS & STANDARD RATINGS

Cap. (µF)	Parameter	80					100				
		Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (µA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz	Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (µA)	ESR (mΩ) max. 20°C, 100KHz	Ripple current (mA rms) 105°C, 100KHz
6.8	685						8 × 9	0.12	136	45	1600
10	106	8 × 9	0.12	160	40	1700	8 × 12	0.12	200	42	1800
12	126	8 × 12	0.12	192	38	1900					
15	156										
18	186						10 × 13	0.12	360	38	2200
22	226	10 × 13	0.12	352	35	2300					

How to order

<u>TPV</u>	<u>A</u>	<u>106</u>	<u>M</u>	<u>0035</u>	<u>B</u>	<u>0025</u>
↓	↓	↓	↓	↓	↓	↓
<u>Type</u>	<u>Material Code</u>	<u>Capacitance code</u>	<u>Tolerance</u>	<u>Rated DC Voltage</u>	<u>Package</u>	<u>Pitch size</u>
TPV	A: Polymer electrolytic cap	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 106 = 10µF 107 = 100µF	M: +/-20%	Code 0035 : 35VDC 0016 = 16VDC 0020 = 20VDC 0025 = 25VDC 0050 = 50VDC 0063 = 63VDC 0080 = 80VDC 0100 = 100VDC	B: Bulk	0020: pitch size 2.0mm 0025: pitch size 2.5mm 0035: pitch size 3.5mm 0050: pitch size 5.0mm