

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

RPR Series Radial lead type, high temperature electrolytic capacitors

Operating with wide temperature range -55~+125°C

Low ESR, high ripple current

Endurance of 3000 hours

RoHS & REACH compliant, Halogen-free

SPECIFICATIONS

Items	Characteristics		
Category Temperature Range	-55 ~ +125°C		
Voltage Range	16 ~ 160V		
Capacitance Range	4.7 ~ 2500μF		
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		
	Impedance Ratio ZT/Z20 (max.)	Z(-25°C)/Z(+20°C)	≤1.15
		Z(-55°C)/Z(+20°C)	≤1.25
Bias Humidity Test	When the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90~95% RH, they meet the characteristics listed below.		
	Capacitance Change	Within ±20% of initial value	
	Dissipation Factor	150% or less of initial specified value	
	ESR	150% or less of initial specified value	
	Leakage Current	Initial specified value or less	
Endurance	When the capacitors are restored to 20°C after 2000 hours application of the rated voltage at 125°C, they meet the characteristics listed below.		
	Capacitance Change	Within ±20% of initial value	
	Dissipation Factor	150% or less of initial specified value	
	ESR	150% or less of initial specified value	
	Leakage Current	Initial specified value or less	
Resistance to Soldering Heat (Please refer page 25 for soldering conditions)	After reflow soldering and restored at room temperature, they meet the characteristics listed below.		
	Capacitance Change	Within ±10% of initial value	
	Dissipation Factor	130% or less of initial specified value	
	ESR	130% or less of initial specified value	
	Leakage Current	Initial specified value or less	
Marking	Red print on the case top.		

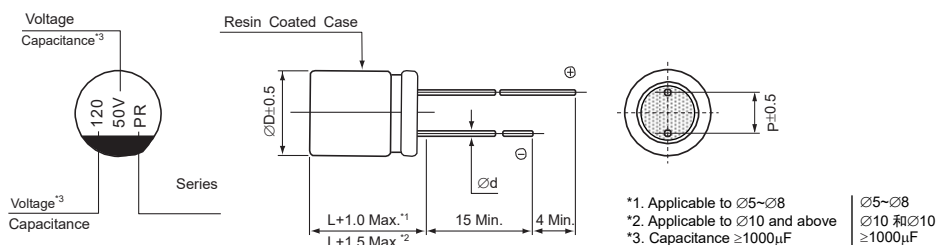
(*1) If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.

(*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)



DIMENSIONS

(Unit: mm)

ØD × L	8 × 8	8 × 12	10 × 12	10 × 16	10 × 21
P	3.5	3.5	5.0	5.0	5.0
Ød	0.6	0.6	0.6	0.6	0.6
L	8.0	12.0	12.0	16.0	21.0

DIMENSIONS & STANDARD RATINGS

WV (V) Parameter Cap. (µF)		16						25					
		Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (µA)	ESR (mΩ) max. 20°C, 100K-300KHz	Ripple current (mA rms, 100KHz)		Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (µA)	ESR (mΩ) max. 20°C, 100K-300KHz	Ripple current (mA rms, 100KHz)	
						≤105°C	105°C≤125°C					≤105°C	105°C≤125°C
100	107							8 × 8	0.10	500	24	2900	1160
150	157							8 × 8	0.10	750	24	2900	1160
220	227							8 × 12	0.10	1100	18	4250	1700
330	337							8 × 12	0.10	1650	18	4250	1700
470	477	8 × 8	0.10	1504	15	4300	1720	8 × 12 (10 × 12)	0.10 (0.10)	2350 (2350)	18 (16)	4250 (4700)	1700 (1880)
560	567							10 × 12	0.10	2800	16	4700	1880
680	687							10 × 12	0.10	3400	16	4700	1880
820	827	8 × 12	0.10	2624	13	4650	1860						
1000	108	10 × 12	0.10	3200	12	5600	2240	10 × 16	0.10	5000	14	5000	2000
1200	128	8 × 16	0.10	3840	13	7000	2500						
1500	158	8 × 20	0.10	4800	13	7500	2800						
1800	188							10 × 21	0.10	9000	14	5400	2160
2200	228	10 × 16	0.10	7040	13	8000	3200						
2500	258	10 × 21	0.10	8000	13	10000	4000						

WV (V) Parameter Cap. (µF)		35						50					
		Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (µA)	ESR (mΩ) max. 20°C, 100K-300KHz	Ripple current (mA rms, 100KHz)		Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (µA)	ESR (mΩ) max. 20°C, 100K-300KHz	Ripple current (mA rms, 100KHz)	
						≤105°C	105°C≤125°C					≤105°C	105°C≤125°C
47	476	8 × 8	0.10	329	30	2600	1040	8 × 12	0.10	470	32	2250	900
68	686	8 × 8	0.10	476	30	2600	1040	8 × 12	0.10	680	32	2250	900
82	826							8 × 12	0.10	820	32	2250	900
100	107	8 × 12	0.10	700	26	2950	1180						
120	127							8 × 12 (10 × 12)	0.10 (0.10)	1200 (1200)	32 (28)	2250 (2620)	900 (1040)
150	157	8 × 12	0.10	1050	26	2950	1180						
180	187	8 × 12	0.10	1260	26	2950	1180	10 × 12	0.10	1800	28	2620	1040
220	227	8 × 12 (10 × 12)	0.10 (0.10)	1540 (1540)	26 (24)	2950 (3400)	1180 (1360)	10 × 12	0.10	2200	28	2620	1040
330	337	10 × 12	0.10	2310	24	3400	1360	10 × 16	0.10	3300	24	3400	1350
470	477							10 × 21	0.10	4700	22	4250	1700
680	687	10 × 16	0.10	4760	22	3800	1520						
1000	108	10 × 21	0.10	7000	20	4580	1830						



Cap. Parameter (μF)		WV (V)	63						100					
			Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100K~300KHz	Ripple current (mA rms, 100KHz)		Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100K~300KHz	Ripple current (mA rms, 100KHz)	
							≤105°C	105°C≤125°C					≤105°C	105°C≤125°C
22	226							8 x 12	0.10	440	40	1850	740	
33	336							10 x 12	0.10	660	38	2100	840	
47	476							10 x 12	0.10	940	38	2100	840	
82	826		8 x 12	0.10	1033	32	2100	840						
100	107		8 x 12	0.10	1260	32	2100	840	10 x 21	0.10	2,000	36	2950	1180
150	157		10 x 12	0.10	1890	28	2550	1020						
180	187		10 x 12	0.10	2268	28	2550	1020						
220	227		10 x 16	0.10	2772	26	3100	1250						
330	337		10 x 21	0.10	4158	24	3570	1420						

Cap. (μF)		WV (V)		160			
				Case size ØD×L (mm)	Dissipation factor (tan δ)	Leakage current (μA)	ESR (mΩ) max. 20°C, 100K~300KHz
4.7	4R7			8 x 12	0.10	150	100
6.8	6R8			8 x 12	0.10	217	100
12	120			10 x 12	0.10	384	120

FREQUENCY COEFFICIENT OF ALLOWABLE RIPPLE CURRENT

Frequency	120Hz ≤ f ≤ 1KHz	1KHz ≤ f ≤ 10KHz	10KHz ≤ f ≤ 100KHz	100KHz ≤ f ≤ 300KHz
Coefficient	0.50	0.30	0.70	1.00

◆ How to order

RPR	337	M	063	01000210	050	B	000	-
↓	↓	↓	↓	↓	↓	↓	↓	↓
Series	Capacitance code	Tolerance	Rated DC Voltage	Size Code	Pitch	Package	Lead Length	Additional characters may be added for special requirements
RPR	pF Code: 1st two digits represent significant figures 3rd digit represents multiplier (number of zeros to follow) 106 = 10uF 107 = 100uF 337 = 330uF	M: +/-20%	Code 016: 16VDC For DC Voltage 016: 16VDC 025: 3=25VDC 035: 35VDC 050: 50VDC 063: 63VDC	00800080: Size 8*8mm 00800120: Size 8*12mm 01000120: Size 10*12mm 01000160: Size 10*16mm 01000210: Size 10*21mm	Axial: 000 2.0: 020 2.5: 025 3.5: 035 5.0: 050 7.5: 075	B: BULK	Standard: 000 Cut Lead Length: 3.0mm: 030 3.5mm: 035 5.0mm: 050	