ELCON

Conductive Polymer Aluminum Solid Electrolytic Capacitors

PR

Radial Lead Type,Long Life Assurance Series

- High reliability,High voltage(to 50V).
- Low ESR, High ripple current.
- Long life of 3000 hours at 125℃.
- Radial lead type: lead free flow soldering condition correspondence.
- RoHS Compliance(2011/65/EU)

■SPECIFICATIONS

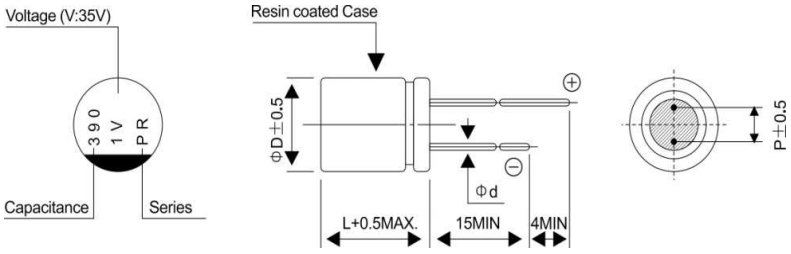
Item	Performance Characteristics		
Category Temperature Range	-55 ~ +125℃		
Rated Voltage Range	16~ 50V		
Rated Capacitance Range	22 to 390μF		
Capacitance Tolerance	± 20 % (at 120Hz , 20℃)		
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20℃		
ESR(※1)	Less than or equal to the specified value at 100KHz, 20℃		
Leakage Current(※2)	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20℃		
Temperature Characteristics (Max. Impedance Ratio)	Z+105℃ / Z+20℃ ≤1.25 (100kHz) Z- 55℃ / Z+20℃ ≤1.25		
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20 ℃ after the rated voltage is applied for 3000 hours at 125 ℃	Capacitance change	Within ±20% of initial value(※3)
		tan δ	150% or less of the initial specified value
		ESR(※1)	150% or less of the initial specified value
		Leakage current(※2)	less than or equal to the initial specified value
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20 ℃ after the rated voltage is applied for 1000 hours at 60 ℃, 90% RH.	Capacitance change	Within ±20% of the initial value(※3)
		tan δ	150% or less of the initial specified value
		ESR(※1)	150% or less of the initial specified value
		Leakage current(※2)	less than or equal to the initial specified value
Resistance to Soldering Heat	After soldering the capacitor under the soldering conditions prescribed here as preheat at 150 to 200℃ for 60 to 180 seconds and peak temperature at 265℃ for 10 seconds or less,the capacitor shall meet the specifications listed at right, provided that its temperature profile is measured at both of terminal ends facing the soldering side.	Capacitance change	Within ±10% of the initial capacitance value(※3)
		tan δ	130% or less than the initial specified value
		ESR(※1)	130% or less than the initial specified value
		Leakage current(※2)	less than or equal to the initial specified value
Marking	Red print on the case top		

※1 ESR should be measured at both of the terminal ends closest to the capacitor body.

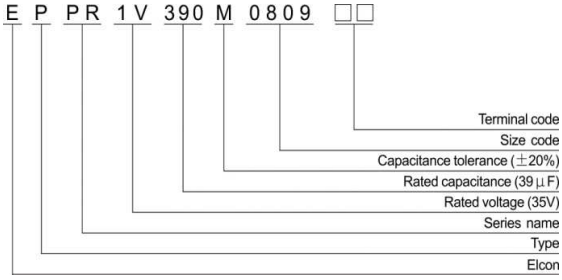
※2 Conditioning: If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minuters at 105 ℃

※3 Initial value: The value before test of examination of resistance to soldering.

■ Dimensions



Type numbering system(Exp: 35V 39μF)



Φ x L(mm)

Size	8x9	8x12	10x13
ΦD	8.0	8.0	10.0
L	8.5	11.5	12.5
P	3.5	3.5	5.0
Φd	0.6	0.6	0.6

Voltage

V	16	20	25	35	50
Code	1C	1D	1E	1V	1H

PR Series

■STANDARD RATINGS

Rated voltage (V)(code)	Surge Voltage (V)	Rated Cpacitance (μF)	Case Size ΦD x L(mm)	tan δ	Leakage Current (μA)	ESR(mΩ) (at 100kHz 20℃)	Rated Ripple (mArms)		Part Number
							≤105℃(*3)	105℃≤125℃(*3)	
16 (1C)	18.4	150	8x9	0.12	480	26	2100	810	EPPR1C151M0809
		220	8x12	0.12	704	25	2400	930	EPPR1C221M0812
		390	10x13	0.12	1248	23	2900	1130	EPPR1C391M1013
20 (1D)	23	120	8x9	0.12	480	27	2000	800	EPPR1D121M0809
		150	8x12	0.12	600	26	2300	910	EPPR1D151M0812
		270	10x13	0.12	1080	24	2800	1110	EPPR1D271M1013
25 (1E)	28.7	82	8x9	0.12	410	28	2000	780	EPPR1E820M0809
		120	8x12	0.12	600	27	2300	890	EPPR1E121M0812
		180	10x13	0.12	900	25	2800	1080	EPPR1E181M1013
35 (1V)	40.2	39	8x9	0.12	273	33	1800	720	EPPR1V390M0809
		56	8x12	0.12	392	31	2100	830	EPPR1V560M0812
		100	10x13	0.12	700	28	2700	1040	EPPR1V101M1013
50 (1H)	57.5	22	8x9	0.12	220	35	1800	700	EPPR1H220M0809
		27	8x12	0.12	270	33	2000	810	EPPR1H270M0812
		47	10x13	0.12	470	29	2600	1020	EPPR1H470M1013