ELCON

Conductive Polymer Aluminum Solid Electrolytic Capacitors

PV

Radial Lead Type, Long Life Assurance Series

- High voltage(to 100V),Low ESR, High ripple current.
- Long life of 3000 hours at 105℃.
- Radial lead type: lead free flow soldering condition correspondence.
- RoHS Compliance(2011/65/EU)

■ SPECIFICATIONS

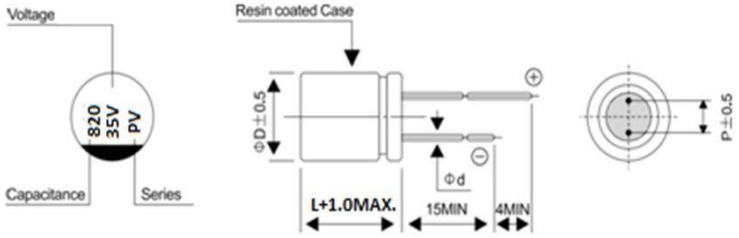
Items	Performance Characteristics		
Category Temperature Range	-55 ~ +105℃		
Rated Voltage Range	16 ~100V		
Rated Capacitance Range	6.8 ~ 470μF		
Capacitance Tolerance	± 20 % (at 120Hz , 20℃)		
Tangent of Loss Angle (tan δ)	Less than or equal to the specified value at 120Hz, 20℃		
ESR(※1)	Less than or 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 3000hours at 105 ℃	Capacitance change	Within ±20% of the initial capacitance value(※3)
		tan δ	150% or less than the initial specified value
		ESR(※1)	150% or less than 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 capacitance value(※3)
		tan δ	150% or less than the initial specified value
		ESR(※1)	150% or less than 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 minutes at 105 ℃

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

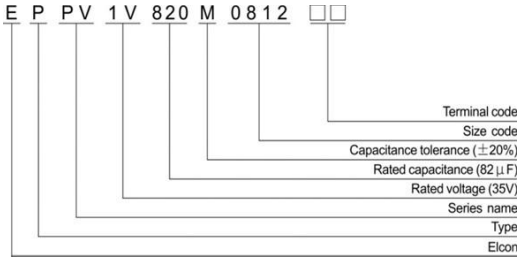
■ Dimensions



Φ x L(mm)

Size	5x8	6.3x6	6.3x8/9	6.3x12	8x8/9	8x11/12	10x12/13	10x16/21
ΦD	5.0	6.3	6.3	6.3	8.0	8.0	10.0	10.0
L	8	6	8/9	12	8/9	11/12	12/13	16/21
P	2.0	2.5	2.5	2.5	3.5	3.5	5.0	5.0
Φd	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6

Type numbering system(Exp: 35V 82μF)



Voltage

V	16	20	25	35	50	63	80	100
Code	1C	1D	1E	1V	1H	1J	1K	2A

PV Series

■ STANDARD RATINGS

Rated voltage (V)(code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size ΦD x L(mm)	tan δ	Leakage Current (μA)	ESR(mΩ) (at 100kHz 20℃)	Rated Ripple (mArms)	Part Number
16 (1C)	18.4	220	8x9	0.12	704	26	2100	EPPV1C221M0809
		270	8x12	0.12	864	24	2500	EPPV1C271M0812
		470	10x13	0.12	1504	23	2900	EPPV1C471M1013
		680	10x13	0.12	2176	23	2900	EPPV1C681M1013
		2200	10x21	0.12	7040	14	4800	EPPV1C222M1021
20 (1D)	23	150	8x9	0.12	600	27	2000	EPPV1D151M0809
		220	8x12	0.12	880	25	2400	EPPV1D221M0812
		330	10x13	0.12	1320	24	2800	EPPV1D331M1013
25 (1E)	28.7	47	6.3x6	0.12	235	49	1300	EPPV1E470M6306
		120	8x9	0.12	600	28	2000	EPPV1E121M0809
		150	6.3x9	0.12	750	23	3300	EPPV1E151M6309
		150	8x12	0.12	750	26	2400	EPPV1E151M0812
		220	8x8	0.12	1100	22	2400	EPPV1E221M0808
		220	8x11	0.12	1100	22	2600	EPPV1E221M0811
		270	6.3x12	0.12	1350	27	2300	EPPV1E271M6312
		270	10x13	0.12	1350	25	2800	EPPV1E271M1013
		330	6.3x12	0.12	1650	27	2300	EPPV1E331M6312
		330	10x10	0.12	1650	22	3100	EPPV1E331M1010
		330	10x12	0.12	1650	22	3300	EPPV1E331M1012
		470	8x12	0.12	2350	20	3300	EPPV1E471M0812
		560	8x12	0.12	2800	15	3400	EPPV1E561M0812
		680	8x12	0.12	3400	15	3700	EPPV1E681M0812
		680	10x13	0.12	3400	15	3900	EPPV1E681M1013
		1000	10x16	0.12	5000	25	4500	EPPV1E102M1016
35 (1V)	40.2	10	5x8	0.12	70	65	1000	EPPV1V100M0508
		47	5x8	0.12	329	55	1700	EPPV1V470M0508
		47	6.3x6	0.12	329	35	1800	EPPV1V470M6306
		56	8x9	0.12	392	29	1900	EPPV1V560M0809
		82	8x12	0.12	574	27	2300	EPPV1V820M0812
		100	6.3x8	0.12	700	28	2500	EPPV1V101M6308
		100	8x8	0.12	700	26	2500	EPPV1V101M0808
		150	10x13	0.12	1050	26	2700	EPPV1V151M1013
		220	8x11	0.12	1540	16	2800	EPPV1V221M0811
		220	8x12	0.12	1540	16	2800	EPPV1V221M0812
		330	10x12	0.12	2310	20	3600	EPPV1V331M1012
		470	10x10	0.12	3290	20	3600	EPPV1V471M1010
		680	10x13	0.12	4760	16	4200	EPPV1V681M1013
		1000	10x21	0.12	7000	16	4700	EPPV1V102M1021
50 (1H)	57.5	33	8x9	0.12	330	32	1900	EPPV1H330M0809
		39	8x12	0.12	390	29	2200	EPPV1H390M0812
		68	10x13	0.12	680	28	2600	EPPV1H680M1013
		220	10x12	0.12	2200	22	3500	EPPV1H221M1012
63 (1J)	72.4	22	8x9	0.12	277	35	1800	EPPV1J220M0809
		27	8x12	0.12	340	33	2100	EPPV1J270M0812
		47	10x13	0.12	592	29	2600	EPPV1J470M1013
		56	10x12	0.12	705	29	2600	EPPV1J560M1012
		180	10x12	0.12	2268	27	3400	EPPV1J181M1012
		330	10x21	0.12	4158	20	4600	EPPV1J331M1021
80 (1K)	92	10	8x9	0.12	160	40	1700	EPPV1K100M0809
		12	8x12	0.12	192	38	1900	EPPV1K120M0812
		22	10x13	0.12	352	35	2300	EPPV1K220M1013
100 (2A)	115	6.8	8x9	0.12	136	45	1600	EPPV2A6R8M0809
		10	8x12	0.12	200	42	1800	EPPV2A100M0812
		18	10x13	0.12	360	38	2200	EPPV2A180M1013