

## PB

## Radial Lead Type, Ultra-low ESR Series

- Ultra-Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type: lead free flow soldering condition correspondence.
- RoHS Compliance (2011/65/EU)



### SPECIFICATIONS

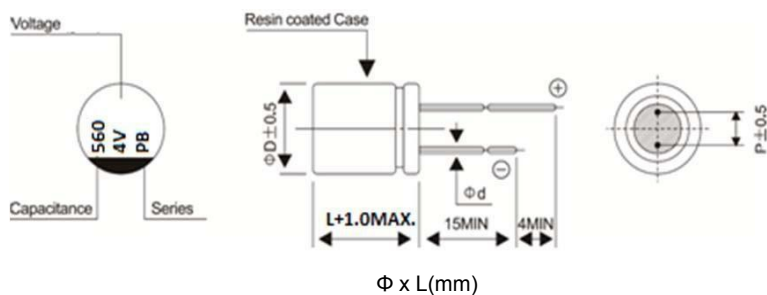
Items	Performance Characteristics		
Category Temperature Range	-55 ~ +105°C		
Rated Voltage Range	2.5 ~ 16V		
Rated Capacitance Range	270 ~ 1500μF		
Capacitance Tolerance	± 20 % (at 120Hz, 20°C)		
Tangent of Loss Angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C		
ESR(※1)	Less than or equal to the specified value at 100KHz, 20°C		
Leakage Current(※2)	Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C		
Temperature Characteristics (Max. Impedance Ratio)	Z+105°C / Z+20°C ≤ 1.25 (100kHz) Z- 55°C / Z+20°C ≤ 1.25		
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20 °C after the rated voltage is applied for 2000 hours at 105 °C	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
Damp Heat (Steady State)	The specifications listed at right shall be met when the capacitors are restored to 20 °C after the rated voltage is applied for 1000 hours at 60 °C, 90% RH.	Leakage current(※2)	Less than or equal to the initial specified value
		Capacitance change	Within ±20% of the initial capacitance value(※3)
		tan δ	150% or less than the initial specified value
Resistance to Soldering Heat	After soldering the capacitor under the soldering conditions prescribed here as preheat at 150 to 200°C for 60 to 180 seconds and peak temperature at 265°C 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.	ESR(※1)	150% or less than the initial specified value
		Leakage current(※2)	Less than or equal to the initial specified value
		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.

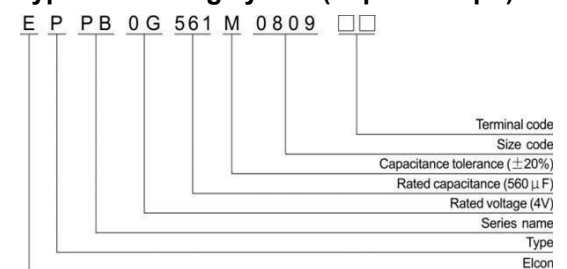
※2 Conditioning: If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105 °C

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

### Dimensions



### Type numbering system (Exp: 4V 560μF)



Size	6.3x8	6.3x11	8x8	8x11	10x12	10x16
ΦD	6.3	6.3	8.0	8	10.0	10
L	8	11	8	11	12	16
P	2.5	2.5	3.5	3.5	5.0	5
Φd	0.6	0.6	0.6	0.6	0.6	0.6

Voltage				
V	2.5	4	6.3	16
Code	0E	0G	0J	1C

**PB 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
2.5 (0E)	2.8	560	6.3x8	0.08	280	7	5900	EPPB0E561M6308
		820	6.3x8	0.08	410	7	5900	EPPB0E821M6308
		820	8x8	0.08	410	7	5900	EPPB0E821M0808
		1000	6.3x8	0.08	500	7	5900	EPPB0E102M6308
		1500	8X8	0.08	750	7	6100	EPPB0E152M0808
4 (0G)	4.6	560	6.3x8	0.08	224	9	5900	EPPB0G561M6308
		680	6.3x8	0.08	272	9	5900	EPPB0G681M6308
		820	6.3x11	0.08	328	7	6150	EPPB0G821M6311
		1200	6.3x11	0.08	480	7	6150	EPPB0G122M6311
6.3 (0J)	7.2	100	5x6	0.08	126			EPPB0J101M0506
		220	6.3x5.5	0.08	278	17	3160	EPPB0J221M6355
		220	6.3x7	0.08	278	10	3600	EPPB0J221M6307
		270	5x7	0.08	340	10	3200	EPPB0J271M0507
		270	5x8	0.08	340	10	3200	EPPB0J271M0508
		270	5x9	0.08	340	10	3200	EPPB0J271M0509
		270	6.3x7	0.08	340	10	4100	EPPB0J271M6307
		330	5x8	0.08	416	10	3200	EPPB0J331M0508
		330	6.3x5.2	0.08	416	9	4800	EPPB0J331M6352
		330	6.3x5.5	0.08	416	9	4800	EPPB0J331M6355
		330	6.3x5.7	0.08	416	9	4800	EPPB0J331M6357
		330	6.3x6	0.08	416	9	4800	EPPB0J331M6306
		330	6.3x8	0.08	416	9	5000	EPPB0J331M6308
		390	5x8	0.08	492	12	3100	EPPB0J391M0508
		390	5x9	0.08	492	12	3100	EPPB0J391M0509
		390	6.3x8	0.08	492	12	3300	EPPB0J391M6308
		470	5x9	0.08	492	12	3600	EPPB0J471M0509
		470	6.3x8	0.08	492	9	5900	EPPB0J471M6308
		470	8x8	0.08	492	9	5900	EPPB0J471M0808
		560	5x9	0.08	706	12	3600	EPPB0J561M0509
		560	6.3x8	0.08	706	9	5900	EPPB0J561M6308
		560	8x8	0.08	706	8	5900	EPPB0J561M0808
		680	5x12	0.08	856	15	5500	EPPB0J681M0512
		680	6.3x8	0.08	1034	9	5900	EPPB0J681M6308
		820	5x11	0.08	1034	8	5500	EPPB0J821M5511
		820	5x12	0.08	1034	8	5500	EPPB0J821M0512
		820	6.3x8	0.08	1034	9	5900	EPPB0J821M6308
		820	6.3x9	0.08	1034	9	5900	EPPB0J821M6309
		820	6.3x11	0.08	1034	7	6150	EPPB0J821M6311
		820	8x8	0.08	1034	9	5900	EPPB0J821M0808
		820	8x11	0.08	1034	9	6150	EPPB0J821M0811
		1000	6.3x11	0.08	1260	12	6150	EPPB0J102M6311
		1000	8x8	0.08	1260	10	6000	EPPB0J102M0808
		1000	8x11	0.08	1260	9	6150	EPPB0J102M0811
		1200	6.3x12	0.08	1512	9	6100	EPPB0J122M6312
		1200	8x12	0.08	1512	9	6150	EPPB0J122M0812
		1500	8x12	0.08	1890	9	6150	EPPB0J152M0812
		1500	10x12	0.08	1890	9	6200	EPPB0J152M1012
		2200	10x12	0.08	2772	9	6200	EPPB0J222M1012
7.5 (0T)	8.6	500	5x9	0.08	375	11	3800	EPPB0J501M0509
		500	6.3x9	0.08	375	9	5900	EPPB0J501M6309
		560	5x9	0.08	420	11	4000	EPPB0J561M0509
		560	6.3x9	0.08	420	9	5900	EPPB0J561M6309
		680	6.3x9	0.08	510	9	5900	EPPB0J681M6309
		820	6.3x9	0.08	615	9	5900	EPPB0J821M6309
10 (1A)	11.5	220	5x8	0.08	440	16	3500	EPPB1A221M0508
		270	6.3x8	0.08	540	10	4100	EPPB1A271M6308
		330	6.3x8	0.08	660	12	4500	EPPB1A331M6308
		330	8x8	0.08	660	12	4620	EPPB1A331M0808
		470	5x11	0.08	940	16	3000	EPPB1A471M0511

# ELCON

## Conductive Polymer Aluminum Solid Electrolytic Capacitors

		470	6.3X8	0.08	940	9	5400	EPPB1A471M6308
		470	8X8	0.08	940	10	5600	EPPB1A471M0808
		560	6.3x9	0.08	1120	9	5400	EPPB1A561M6309
		560	8X8	0.08	1120	9	5600	EPPB1A561M0808
		680	6X12	0.08	1360	13	3650	EPPB1A681M0612
		680	6.3x12	0.08	1360	13	3650	EPPB1A471M0511
		680	8X8	0.08	1360	9	5600	EPPB1A681M0808
		680	8X11	0.08	1360	9	6100	EPPB1A681M0811
		820	8X11	0.08	1360	9	6100	EPPB1A821M0811
		1000	8X11	0.08	2000	9	6200	EPPB1A102M0811
		1500	8X12	0.08	3000	10	5700	EPPB1A152M0812
		1500	10X12	0.08	3000	9	6100	EPPB1A152M1012
		2200	10X12	0.08	4400	9	6500	EPPB1A222M1012
12( 1R)	13.8	330	5X9	0.08	396	14	3800	EPPB1R331M0509
		330	5.5X9	0.08	396	14	3800	EPPB1R331M5509
		330	6.3X8	0.08	396	12	2690	EPPB1C331M6308
16( 1C)	18.4	100	5x8	0.08	160	24	2500	EPPB1C101M0508
		100	6.3x6	0.08	160	24	2560	EPPB1C101M6306
		100	6.3X7	0.08	160	16	3250	EPPB1C101M6307
		220	5X9	0.08	352	20	3300	EPPB1C221M0509
		220	6.3X8	0.08	352	12	3550	EPPB1C221M6308
		270	5.5x10	0.08	432	10	4100	EPPB1C271M5510
		270	6.3X8	0.08	432	10	4100	EPPB1C271M6308
		270	8X8	0.08	432	10	5000	EPPB1C271M0808
		270	8X11	0.08	432	10	5000	EPPB1C271M0811
		330	5.5X11	0.08	528	14	4000	EPPB1C331M5511
		330	6.3X7	0.08	528	12	4500	EPPB1C331M6307
		330	6.3X8	0.08	528	12	4500	EPPB1C331M6308
		330	6.3X9	0.08	528	12	4500	EPPB1C331M6309
		330	6.3X11	0.08	528	12	4300	EPPB1C331M6311
		330	8X8	0.08	528	10	5000	EPPB1C331M0808
		330	10X12	0.08	528	9	6100	EPPB1C331M1012
		390	8X8	0.08	624	10	5000	EPPB1C391M0808
		470	6.3X10.5	0.08	752	10	5200	EPPB1C471M6310
		470	6.3X11	0.08	752	12	4100	EPPB1C471M6310
		470	6.3X12	0.08	752	10	5200	EPPB1C471M6312
		470	8X8	0.08	752	13	5000	EPPB1C471M0808
		470	8X11	0.08	752	10	5400	EPPB1C471M0811
		470	10X10	0.08	752	9	5800	EPPB1C471M1010
		470	10X12	0.08	752	9	5800	EPPB1C471M1012
		560	6.3x12	0.08	896	12	5200	EPPB1C561M6312
		560	6.3x11	0.8	896	12	5200	EPPB1C561M6311
		560	8X9	0.08	896	12	5200	EPPB1C561M0809
		560	8X11	0.08	896	10	5400	EPPB1C561M0811
		680	6.3x11	0.08	1088	10	4600	EPPB1C681M6311
		680	6.3X14	0.08	1088	10	4600	EPPB1C681M6314
		680	8X11	0.08	1088	10	5400	EPPB1C681M0811
		820	8X10.5	0.08	1312	10	5700	EPPB1C821M0810
		820	8X12	0.08	1312	10	5700	EPPB1C821M0812
		820	10X12	0.08	1312	10	5800	EPPB1C821M1012
		1000	8X12	0.08	1600	10	6000	EPPB1C102M0812
		1000	10X12	0.08	1600	9	6500	EPPB1C102M1012
		1200	8x12	0.08	1920	9	6500	EPPB1C121M0812
		1200	10X12	0.08	1920	9	6500	EPPB1C121M1012
		1500	8x16	0.08	2400	9	6500	EPPB1C152M0816
		1500	10X12	0.08	2400	9	6500	EPPB1C152M1012
		1500	10X13	0.08	2400	9	6500	EPPB1C152M1013
		1500	10X16	0.08	2400	9	6500	EPPB1C152M1016
		2200	10X16	0.08	3520	10	5800	EPPB1C222M1016
18V(1Z)		1000	10X12	0.08	1800	9	6500	EPPB1Z102M1012