

# SAMSON

## 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

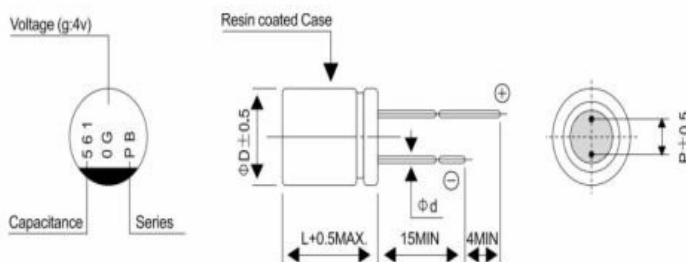
Item	Performance Characteristics		
Category Temperature Range	-55 ~ +105°C		
Rated Voltage Range	2.5 ~ 16V		
Rated Capacitance Range	270 to 1500μF		
Capacitance Tolerance	±20 % (at 120Hz , 20 °C)		
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C		
ESR(※1)	Less than 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
		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 °C after the rated voltage is applied for 1000 hours at 60 °C, 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°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.	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



Φ x L(mm)

Size	6.3x8	6.3x11	8x8	8x11
ΦD	6.3	6.3	8.0	8
L	7.5	10.5	7.5	10.5
P	2.5	2.5	3.5	3.5
Φd	0.6	0.6	0.6	0.6

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### ■ STANDARD RATINGS

Rated voltage (V)(code)	Surge Voltage (V)	Rated Capacitance ( $\mu$ F)	Case Size $\Phi$ D x L(mm)	tan $\delta$	Leakage Current ( $\mu$ A)	ESR(m $\Omega$ ) (at 100kHz 20 $^{\circ}$ C)	Rated Ripple (mArms)
2.5 (0E)	2.8	560	6.3x8	0.08	280	7	5900
		820	6.3x8	0.08	410	7	5900
		1000	6.3x8	0.08	500	7	5900
		1500	8X8	0.08	750	7	6100
4 (0G)	4.6	560	6.3x8	0.08	448	9	5900
		680	6.3x8	0.08	544	9	5900
		820	6.3x11	0.08	656	7	6150
		1200	6.3x11	0.08	960	7	6150
6.3 (0J)	7.2	470	6.3x8	0.08	592	9	5900
		680	6.3x8	0.08	857	9	5900
		820	6.3x11	0.08	1033	7	6150
16 (1C)	18.4	270	8X8	0.08	864	10	5000
		330	8X8	0.08	1056	10	5000
		470	8X11	0.08	1504	10	5400
		680	8X11	0.08	2176	10	5400