

# SAMSON

## PA Radial Lead Type, Standard Series

- 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

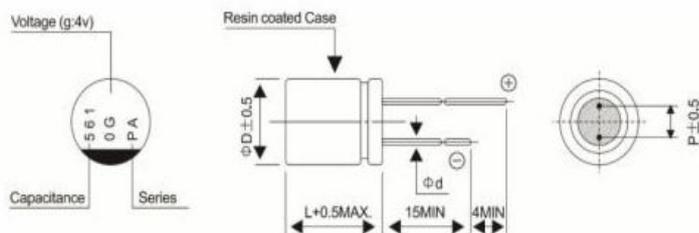
Item	Performance Characteristics		
Category Temperature Range	-55 ~ +105°C		
Rated Voltage Range	2.5 ~ 25V		
Rated Capacitance Range	6.8 to 1500μF		
Capacitance Tolerance	±20 % (at 120Hz, 20°C)		
Tangent of loss angle (tan δ)	Less than or equal to the specified value at 120Hz, 20°C		
ESR(※1)	Less than 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
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
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
Marking	Red print on the case top	Leakage current(※2)	less than or equal to the initial specified value
		Leakage current(※2)	less than or equal to the initial specified value
		Leakage current(※2)	less than or equal to the initial specified value

※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	6.3x6	6.3x9	6.3x10.5	8x7	8x9	8x12	10x8	10x10	10x13
ΦD	6.3	6.3	6.3	8.0	8.0	8.0	10.0	10.0	10.0
L	5.5	8.5	10.0	6.5	8.5	11.5	7.5	9.5	12.5
P	2.5	2.5	2.5	3.5	3.5	3.5	5.0	5.0	5.0
Φd	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6

# SAMSON

## PA Series

### ■ STANDARD RATINGS

Rated voltage (V)(code)	Surge Voltage (V)	Rated Capacitance (μF)	Case Size Φ D x L(mm)	tan δ	Leakage Current (μA)	ESR(mΩ) (at 100kHz 20 °C)	Rated Ripple (mArms)
2.5 (0E)	2.8	330	6.3x9	0.08	500	7	5600
		390	6.3x10.5	0.08	195	20	3200
		560	6.3x9	0.08	500	7	5600
		560	8x9	0.08	280	6	4800
		680	8x9	0.08	340	7	4800
		680	8x12	0.08	340	6	5700
		820	6.3x9	0.08	500	7	5600
		820	8x9	0.08	410	7	5200
		820	8x12	0.08	410	6	6200
		1000	10x13	0.08	500	6	6500
		1200	10x13	0.08	600	8	5300
		1500	8x12	0.08	750	7	6100
1500	10x13	0.08	750	8	5500		
4 (0G)	4.6	270	6.3x9	0.08	500	7	5600
		270	6.3x10.5	0.08	216	20	3200
		390	6.3x10.5	0.08	312	24	3300
		560	8x9	0.08	448	7	5200
		560	8x12	0.08	448	7	5500
		680	8x12	0.08	544	6	6200
		820	10x13	0.08	656	6	6500
		1000	10x13	0.08	800	6	6640
		1200	10x13	0.08	960	8	5600
6.3 (0J)	7.2	220	6.3x10.5	0.08	277	20	3200
		330	6.3x10.5	0.08	416	24	3300
		470	8x9	0.08	592	7	5200
		470	8x12	0.08	592	7	5500
		680	10x13	0.08	857	6	6300
10 (1A)	11.5	47	6.3x10.5	0.08	94	25	2900
		68	6.3x10.5	0.08	136	25	2900
		100	6.3x10.5	0.08	200	25	2900
		150	6.3x10.5	0.08	300	25	2900
		270	8x12	0.08	540	8	4900
		470	10x13	0.08	940	7	5700
		560	10x13	0.08	1120	7	5900
		680	10x13	0.08	1360	7	6100
16 (1C)	18.4	100	6.3x10.5	0.08	320	24	2900
		180	8x12	0.08	576	9	5000
		270	8x12	0.08	864	9	5100
		330	10x13	0.08	1056	9	6100
		470	10x13	0.08	1504	9	6100
20 (1D)	23	22	6.3x6	0.12	88	50	1700
		39	8x7	0.12	156	45	2000
		47	8x7	0.12	188	45	2000
		56	10x8	0.12	224	40	2400
		68	10x8	0.12	272	40	2600
		82	10x8	0.12	328	40	2600
		100	8x12	0.12	400	22	3320
		120	10x10	0.12	480	35	2800
		150	10x13	0.12	600	20	4320
25 (1E)	28.7	6.8	6.3x6	0.12	85	80	1200
		10	6.3x6	0.12	125	65	1500
		10	8x7	0.12	125	60	1500
		22	8x7	0.12	275	50	1800
		47	10x13	0.12	588	30	3000
		56	10x13	0.12	700	28	3800