



# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

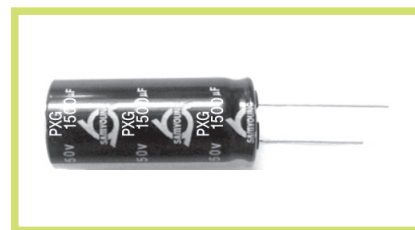
## PXG Series

• 125°C 3,000Hrs assured.

- Low impedance.
- Wide Temperature Range.
- Downsize, High Ripple
- RoHS compliant.
- Halogen-free capacitors are also available.



High Ripple

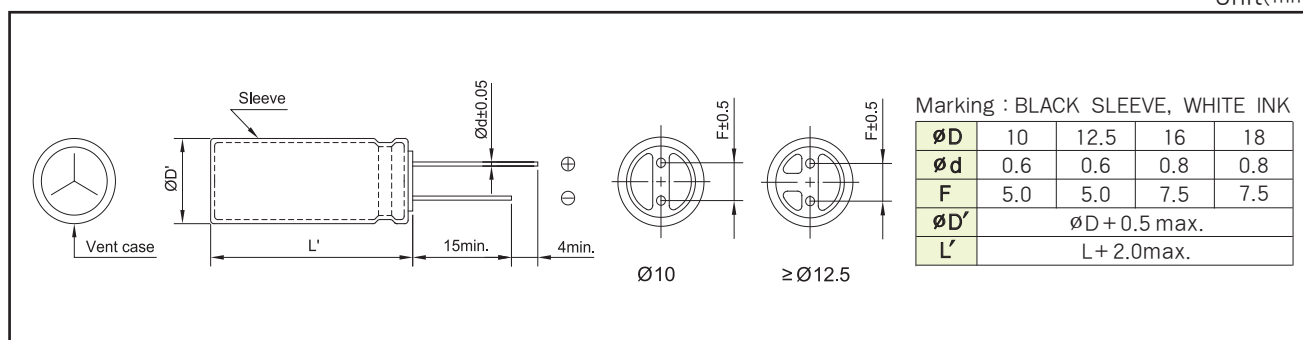


## SPECIFICATIONS

Item	Characteristics															
Rated Voltage Range	10 ~ 100 V <sub>DC</sub>															
Operating Temperature Range	-40 ~ +125°C															
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)															
Leakage Current	$I = 0.03CV (\mu A)$ or $4\mu A$ , whichever is greater. Where, I:Max. leakage current( $\mu A$ ), C:Nominal capacitance( $\mu F$ ), V:Rated voltage(V <sub>DC</sub> ) (at 20°C, 1 minute)															
Dissipation Factor (Tan $\delta$ )	<table border="1"> <tr> <td>Rated Voltage(V<sub>DC</sub>)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50~63</td> <td>80~100</td> </tr> <tr> <td>Tan<math>\delta</math>(Max.)</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.08</td> </tr> </table> (at 20°C, 120Hz)	Rated Voltage(V <sub>DC</sub> )	10	16	25	35	50~63	80~100	Tan $\delta$ (Max.)	0.20	0.16	0.14	0.12	0.10	0.08	
Rated Voltage(V <sub>DC</sub> )	10	16	25	35	50~63	80~100										
Tan $\delta$ (Max.)	0.20	0.16	0.14	0.12	0.10	0.08										
Temperature Characteristics (Max. Impedance ratio)	<table border="1"> <tr> <td>Rated Voltage(V<sub>DC</sub>)</td> <td>10</td> <td>16~35</td> <td>50~80</td> <td>100</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>3</td> <td>2</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>6</td> <td>4</td> <td>5</td> <td>6</td> </tr> </table> (at 120Hz)	Rated Voltage(V <sub>DC</sub> )	10	16~35	50~80	100	Z(-25°C)/Z(20°C)	3	2	3	3	Z(-40°C)/Z(20°C)	6	4	5	6
Rated Voltage(V <sub>DC</sub> )	10	16~35	50~80	100												
Z(-25°C)/Z(20°C)	3	2	3	3												
Z(-40°C)/Z(20°C)	6	4	5	6												
Load Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage with the rated ripple current is applied for 3,000 hours at 125°C. Capacitance change ≤ ±30% of the initial value Tan $\delta$ ≤ 300% of the initial specified value Leakage Current ≤ The initial specified value															
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 125°C without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurements. Capacitance change ≤ ±30% of the initial value Tan $\delta$ ≤ 300% of the initial specified value Leakage current ≤ The initial specified value															
Others	Satisfied characteristics KS C IEC 60384-4															

## DIMENSIONS OF PXG Series

Unit(mm)



**RATINGS OF PXG Series**

V <sub>DC</sub> ∅D×L(mm)	10				16				25			
	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)
		20°C	-40°C			20°C	-40°C			20°C	-40°C	
10 × 12.5	1000	0.14	2.1	900	560	0.14	2.1	900	470	0.14	2.1	900
10 × 20	1800	0.073	1.1	1540	1200	0.073	1.1	1540	820	0.073	1.1	1540
12.5 × 20	3300	0.038	0.190	1590	1800	0.038	0.190	1590	1500	0.038	0.190	1590
12.5 × 25	4700	0.030	0.140	2280	2700	0.030	0.140	2280	2200	0.030	0.140	2280
16 × 25	6800	0.022	0.092	3030	4700	0.022	0.092	3030	3300	0.022	0.092	3030
16 × 31.5	8200	0.018	0.071	3330	5600	0.018	0.071	3330	3900	0.018	0.071	3330

V <sub>DC</sub> ∅D×L(mm)	35				50				65			
	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)
		20°C	-40°C			20°C	-40°C			20°C	-40°C	
10 × 12.5	220	0.14	2.1	900	150	0.18	2.7	860	120	0.38	5.7	630
10 × 20	470	0.073	1.1	1540	330	0.095	1.4	1370	220	0.20	3.0	940
12.5 × 20	1000	0.038	0.190	1590	470	0.049	0.247	1670	330	0.097	0.750	1310
12.5 × 25	1200	0.030	0.140	2280	820	0.038	0.180	2030	470	0.072	0.550	1880
16 × 25	2200	0.022	0.092	3030	1200	0.027	0.130	2690	820	0.047	0.270	2300
16 × 31.5	2700	0.018	0.071	3330	1500	0.023	0.094	3150	1000	0.037	0.230	2940

V <sub>DC</sub> ∅D×L(mm)	80				100			
	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)	μF	Impedance (Ω max./100kHz)		Rated Ripple Current (mA <sub>RMS</sub> ) (125°C, 100kHz)
		20°C	-40°C			20°C	-40°C	
10 × 12.5	82	0.38	5.7	630	68	0.42	6.3	570
10 × 20	150	0.20	3.0	940	150	0.25	3.8	800
12.5 × 20	220	0.097	0.750	1310	220	0.120	0.940	1210
12.5 × 25	330	0.072	0.550	1880	330	0.082	0.700	1800
16 × 25	560	0.047	0.270	2300	470	0.057	0.390	2190
16 × 31.5	680	0.037	0.230	2940	680	0.044	0.330	2770

**RATED RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

Cap.(μF) \ Freq.(Hz)	120	1k	10k	50k	100k
68 ~ 150	0.40	0.75	0.90	0.93	1.00
220 ~ 820	0.50	0.85	0.94	0.96	1.00
1,000 ~ 1,800	0.60	0.87	0.95	0.97	1.00
2,200 ~ 3,900	0.75	0.90	0.95	0.97	1.00
4,700 ~ 8,200	0.85	0.95	0.98	0.99	1.00