

## PXA Series

• 125°C 1,000~2,000Hrs assured.

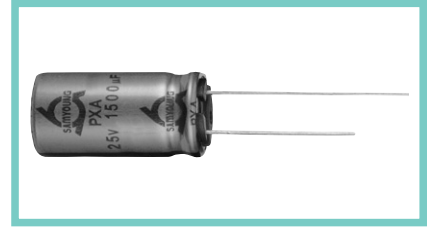
- Low impedance.
- Wide Temperature range.
- For ECU, BLU, Cooling fan
- RoHS compliant.

Solvent-proof

WV ≤ 80V<sub>DC</sub>



Wide Temp  
Low Imp.



## SPECIFICATIONS

Item	Characteristics																							
Rated Voltage Range	10 ~ 80 V <sub>DC</sub>	160 ~ 400 V <sub>DC</sub>	450 V <sub>DC</sub>																					
Operating Temperature Range	-40 ~ +125°C	-40 ~ +125°C	-25 ~ +125°C																					
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)																							
Leakage Current	I = 0.03CV (μA) or 4μA, whichever is greater	CV ≤ 1,000 I = 0.1CV + 40	CV > 1,000 I = 0.1CV + 100																					
Where, I : Max. leakage current (μA) C: Nominal capacitance (μF) V: Rated voltage(V <sub>DC</sub> ) (at 20°C, 1 minute)																								
Dissipation Factor (Tan δ)	<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</td> <td>160~250</td> <td>350~450</td> </tr> <tr> <td>Tan δ(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> <td>0.20</td> <td>0.24</td> </tr> </table> <p>When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase. (at 20°C, 120Hz)</p>			Rated voltage(V <sub>DC</sub> )	10	16	25	35	50~63	80	160~250	350~450	Tan δ(Max.)	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.24			
Rated voltage(V <sub>DC</sub> )	10	16	25	35	50~63	80	160~250	350~450																
Tan δ(Max.)	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.24																
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>160~250</td> <td>350~400</td> <td>450</td> </tr> <tr> <td>Z(-25°C)/Z(+20°C)</td> <td>3</td> <td>2</td> <td>3</td> <td>3</td> <td>6</td> <td>6</td> </tr> <tr> <td>Z(-40°C)/Z(+20°C)</td> <td>6</td> <td>4</td> <td>5</td> <td>6</td> <td>10</td> <td>-</td> </tr> </table> <p>(at 120Hz)</p>			Rated Voltage(V <sub>DC</sub> )	10	16~35	50~80	160~250	350~400	450	Z(-25°C)/Z(+20°C)	3	2	3	3	6	6	Z(-40°C)/Z(+20°C)	6	4	5	6	10	-
Rated Voltage(V <sub>DC</sub> )	10	16~35	50~80	160~250	350~400	450																		
Z(-25°C)/Z(+20°C)	3	2	3	3	6	6																		
Z(-40°C)/Z(+20°C)	6	4	5	6	10	-																		
Load Life	<p>The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2,000 hours at 125°C. (where, 1,000 hours ≤ ∅ 8)</p> <p>Capacitance change ≤ ±30% of the initial value (where, ±20% for ≥ WV 160V<sub>DC</sub>)                      Tan δ ≤ 300% of the initial specified value (where, 200% for ≥ WV 160V<sub>DC</sub>)                      Leakage current ≤ The initial specified value</p>																							
Shelf Life	<p>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 measurement. (where, 500 Hours ≤ ∅ 8)</p> <p>Capacitance change ≤ ±30% of the initial value (where, ±20% for ≥ WV 160V<sub>DC</sub>)                      Tan δ ≤ 300% of the initial specified value (where, 200% for ≥ WV 160V<sub>DC</sub>)                      Leakage current ≤ The initial specified value (where, 500% for ≥ WV 160V<sub>DC</sub>)</p>																							
Others	Satisfied characteristics W of KS C 6421																							

## DIMENSIONS OF PXA Series

Unit (mm)

Marking : GREEN SLEEVE, BLACK INK

∅ D	8	10	12.5	16
∅ d	0.6	0.6	0.6	0.8
F	3.5	5.0	5.0	7.5

∅ D = 8, ∅ D' ≤ +0.5, L' ≤ L + 1.5  
 ∅ D > 8, ∅ D' ≤ +0.5, L' ≤ L + 2.0



# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

## RATINGS OF PXA Series

V <sub>DC</sub>	10(1A)			16(1C)			25(1E)			35(1V)					
	Items	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)		
			(20°C, 100kHz)			(125°C, 100kHz)			(20°C, 100kHz)			(125°C, 100kHz)		(20°C, 100kHz)	(125°C, 100kHz)
100					8 × 11.5	0.35	325	8 × 11.5	0.35	325	8 × 11.5	0.35	325		
220	8 × 11.5	0.35	325	10 × 12.5	0.25	480	10 × 12.5	0.25	480	10 × 12.5	0.25	480	10 × 12.5	0.25	480
330	10 × 12.5	0.25	480	10 × 12.5	0.25	480	10 × 16	0.15	625	10 × 20	0.11	799	10 × 20	0.11	799
470	10 × 12.5	0.25	480	10 × 16	0.15	625	10 × 20	0.11	799	12.5 × 20	0.068	997	12.5 × 20	0.068	997
1,000	10 × 20	0.11	799	12.5 × 20	0.068	997	12.5 × 25	0.058	1,121	16 × 25	0.040	1,426	16 × 25	0.040	1,426
2,200	12.5 × 25	0.058	997	16 × 25	0.040	1,426	16 × 31.5	0.034	1,595						
3,300	16 × 25	0.040	1,426	16 × 31.5	0.034	1,595									
4,700	16 × 31.5	0.034	1,595												

V <sub>DC</sub>	50(1H)			63(1J)			80(1K)			
	Items	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)	∅ D × L (mm)	Imp. (∅ max.)	Rated Ripple Current (mArms)
			(20°C, 100kHz)			(125°C, 100kHz)			(20°C, 100kHz)	
10	8 × 11.5	0.75	180							
22	8 × 11.5	0.50	250				8 × 11.5	1.5	150	
33	8 × 11.5	0.50	280	8 × 11.5	1.5	150	10 × 12.5	0.80	480	
47	8 × 11.5	0.50	280	10 × 12.5	0.80	480	10 × 12.5	0.80	480	
100	10 × 12.5	0.25	480	10 × 16	0.58	650	10 × 20	0.39	790	
220	10 × 20	0.15	625	12.5 × 20	0.27	950	12.5 × 25	0.18	1,240	
330	12.5 × 20	0.081	990	12.5 × 25	0.18	1,240	12.5 × 30	0.16	1,390	
470	12.5 × 25	0.059	1,150	12.5 × 30	0.16	1,390	16 × 25	0.11	1,500	
1,000	16 × 31.5	0.032	1,590	16 × 31.5	0.090	1,650				

V <sub>DC</sub>	160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		450(2W)		
	Items	∅ D × L (mm)	Rated Ripple Current (mArms)	∅ D × L (mm)	Rated Ripple Current (mArms)	∅ D × L (mm)	Rated Ripple Current (mArms)	∅ D × L (mm)	Rated Ripple Current (mArms)	∅ D × L (mm)	Rated Ripple Current (mArms)	∅ D × L (mm)	Rated Ripple Current (mArms)
			(125°C, 120Hz)		(125°C, 120Hz)		(125°C, 120Hz)		(125°C, 120Hz)		(125°C, 120Hz)		(125°C, 120Hz)
4.7							10 × 16	53	10 × 20	53	10 × 25	58	
10				10 × 16	78	10 × 20	78	10 × 20	85	12.5 × 20	86	12.5 × 20	86
22	10 × 16	115	10 × 20	126	12.5 × 20	128	12.5 × 25	139	12.5 × 30	142	16 × 25	154	
33	10 × 20	154	12.5 × 20	157	12.5 × 25	171	16 × 25	189	16 × 25	189	16 × 31.5	203	
47	12.5 × 20	187	12.5 × 25	204	16 × 25	225	16 × 31.5	243	16 × 31.5	243			
68	12.5 × 25	245	16 × 20	250	16 × 31.5	292							
100	16 × 25	329	16 × 25	329									
150	16 × 31.5	434											

### RATED RIPPLE CURRENT MULTIPLIERS

(10 ~ 80V<sub>DC</sub>)

Cap. (μF)	Freq. (Hz)			
	120	1k	10k	100k
4.7 ~ 100	0.40	0.75	0.90	1.00
220 ~ 470	0.50	0.85	0.94	1.00
1,000	0.60	0.87	0.95	1.00
2,200 ~ 3,300	0.75	0.90	0.95	1.00
~ 4,700	0.85	0.95	0.98	1.00

(160 ~ 450V<sub>DC</sub>)

Cap. (μF)	Freq. (Hz)				
	120	300	1k	10k	100k
4.7 ~ 33	1.00	1.25	1.50	1.75	1.80
47 ~ 150	1.00	1.15	1.30	1.40	1.50