

# ALUMINUM ELECTROLYTIC CAPACITORS



## PY Series

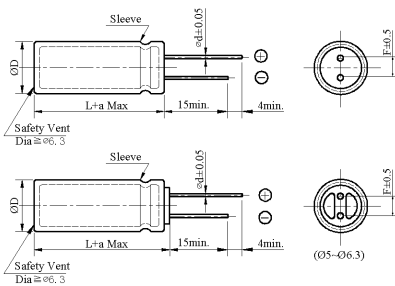
- High-temperature 125°C, High reliability
- Load life 2,000 hours at 125°C



### ◆ SPECIFICATIONS

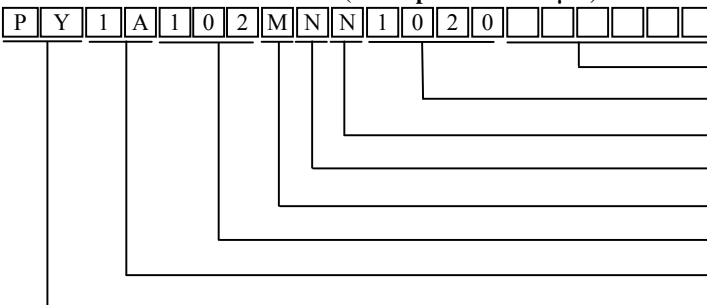
Item	Performance Characteristics	
Category Temperature Range	-40 ~ +125°C	-25 ~ +125°C
Working Voltage Range	10 ~ 100Vdc	160 ~ 450Vdc
Capacitance Range	4.7 ~ 1000 µF	4.7 ~ 150 µF
Capacitance Tolerance	±20% (at 25°C and 120Hz)	
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)	10 16 25 35 50 63 100 160 ~ 250 350 ~ 450
	tanδ(Max)	0.20 0.16 0.14 0.12 0.10 0.10 0.09 0.20 0.24
The above values should be increased by 0.02 for every additional 1000µF		
Leakage Current	I ≧ 0.01CV or 2µA whichever is greater (10 ~ 100V)	
	I ≧ 0.03CV + 10µA (160 ~ 450V)	
I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 2 minutes		
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	10 16 25 35 50 63 100 160 ~ 250 350 400 ~ 450
	Z(-40°C)/Z(+20°C)	6 4 4 4 4 4 4 — — —
	Z(-25°C)/Z(+20°C)	— — — — — — — 3 6 6
(at 120Hz)		
Endurance	The following specifications shall be satisfied when the capacitors are restored to 25°C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 125°C	
	Capacitance change	≧ ±25% of the initial value
	Dissipation factor(tanδ)	≧ 200% of the specified value
	Leakage current	≧ specified value
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 1,000 hours at 125°C without voltage applied. After test : UR to be applied for 30 minutes, 24 to 48 hours before measurement.	
	Capacitance change	≧ ±25% of the initial value
	Dissipation factor(tanδ)	≧ 200% of the specified value
	Leakage current	≧ 200% of the specified value
Others	Conforms to JIS-C-5101-4 (1998), characteristic W	

### ◆ DIMENSIONS (mm)



ΦD	6.3	8	10	12.5 L < 35	12.5 ≥ 35	16
ΦD	ΦD + 0.5 Max					
Φd	0.5	0.6	0.6	0.6	0.8	0.8
F	2.5	3.5	5.0	5.0		7.5
a	L + 1.5 Max			≧ 35 L + 1.5 Max ≧ 40 L + 2.0 Max		L + 1.5 Max

### ◆ PART NUMBER SYSTEM( Example : 10V 1000µF )





## PY Series

◆ Case size & Permissible rated ripple current: (mA rms) at 125°C / 120Hz

uF \ Vdc	10		16		25	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
22					6.3×11	70
33			6.3×11	70	8×11.5	90
47	6.3×11	80	6.3×11	82	8×11.5	110
100	6.3×11	105	8×11.5	146	8×11.5	220
220	8×11.5	230	10×12.5	300	10×12.5	450
330	10×12.5	310	10×12.5	385	10×16	620
470	10×12.5	420	10×16	520	10×20	800
1000	10×20	760	12.5×20	800	12.5×25	900

uF \ Vdc	35		50		100	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
4.7					8×11.5	72
10					8×11.5	120
22	8×11.5	78	8×11.5	150	10×12.5	200
33	8×11.5	105	8×11.5	182	10×12.5	225
47	8×11.5	148	8×15	205	10×16	330
100	10×12.5	252	10×16	442	12.5×20	550
220	10×16	530	10×20	690	16×25	763
330	10×20	710	10×25	885	16×30	950
470	12.5×20	890	12.5×25	1120		
1000	16×25	1100	16×30	1405		

uF \ Vdc	160		200		250	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
10			10×20	86	10×20	90
22	10×20	120	10×25	138	12.5×20	140
33	10×25	160	12.5×20	172	12.5×25	188
47	12.5×20	195	12.5×25	224	16×25	250
68	12.5×25	255	16×20	275	16×30	320
100	16×25	345	16×25	360		
150	16×30	450				

uF \ Vdc	350		400		450	
	ΦD × L	RC	ΦD × L	RC	ΦD × L	RC
4.7	10×20	58	10×20	60	10×25	70
10	10×25	94	10×25	100	12.5×20	103
22	12.5×25	152	12.5×30	163	16×25	185
33	16×25	208	16×25	217	16×30	245
47	16×30	265	16×30	280		

◆ RIPPLE CURRENT MULTIPLIERS  
(10 to 100Vdc) Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)			
		50/60	120	1K	≥10K
10 ~ 100	<100	0.75	1.00	1.57	2.00
	100 ~ 470	0.80	1.00	1.34	1.50
	>470	0.85	1.00	1.10	1.15

(160 to 450Vdc) Frequency Multipliers

Vdc	Cap(uF)	Frequency (Hz)				
		50	120	1 K	10 K	100 K
160 ~ 450	4.7~33	0.75	1.00	1.50	1.75	1.80
	47~150	0.80	1.00	1.30	1.40	1.50