

PY Series

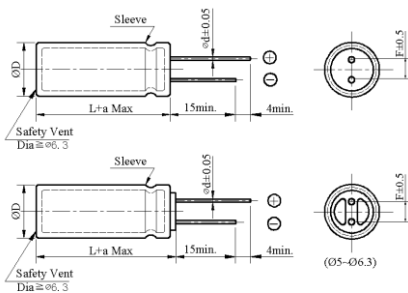
- High-temperature 125°C, High reliability
- Load life 2,000 hours at 125°C



◆ 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	16
ΦD	ΦD + 0.5 Max				
Φd	0.5	0.6	0.6	0.6	0.8
F	2.5	3.5	5.0	5.0	7.5
a	L + 1.5 Max			≧ 35 L + 1.5Max ≧ 40 L + 2.0 Max	L + 1.5 Max

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

P Y 1 A 1 0 2 M N N 1 0 2 0

Special Request

Size code(1020 : 10×20)

Lead length code

Lead forming Type code

Capacitance tolerance code(M: ±20%)

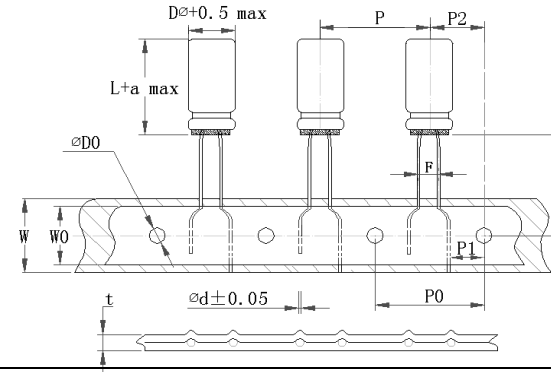
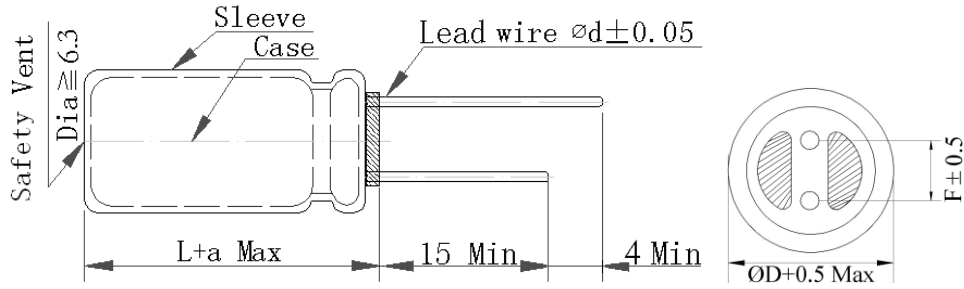
Capacitance code (1000µF)

Voltage code (10V)

Series code (PY)

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	PY	NO.:	PUBLISH DATE	2022-03-25
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Unit (mm):

P=12.7±1.0	H=18.5±0.5
P0=12.7±0.2	P1=3.85±0.5
P2=6.35±1.0	W =18.0±0.5
F=2.5+0.8/-0.2	W0=12.5MIN
ΦD0=4.0±0.2	t=0.7±0.2

Original

FIG-1

No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tanδ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 125°C 120Hz	Rated Ripple Current (mA rms) @125°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 125°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F	
1	PY1H4R7MP20511U	/	4.7 μF	±20%	50 V	/	-40~+125	/	/	80	160	12000	2200	2000	5	11	/	/	2.5	FIG-1
2	PY1H100MP20511EU	/	10 μF	±20%	50 V	/	-40~+125	/	/	/	300	/	650	2000	5	11	/	/	2.5	FIG-1

※Test leakage current before testing dissipation factor and capacitance during the electric characteristic test.

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black. Suffix U indicates convex rubber cover.	张洪斌	曾爱娥	梁慧妍