

PI Series

- Endurance with ripple current: 3,000 hours at 105°C



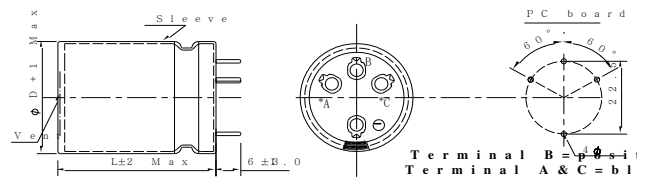
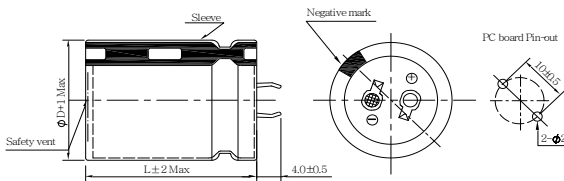
SPECIFICATIONS

Item	Performance Characteristics			
Category Temperature Range	-25 ~ +105°C			
Working Voltage Range	400 ~ 450Vdc			
Capacitance Range	56 ~ 680µF			
Capacitance Tolerance	±20% (at 25°C and 120Hz)			
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)	400	420	450
	tanδ(Max)	0.15	0.20	0.20
Leakage Current	$I \leq 3 \sqrt{CV}$ I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 5 minutes			
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	400	420~ 450	
	Z(-25°C)/Z(+20°C)	4	8	
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 3,000 hours at 105°C.			
	Capacitance change	≒ ±20% of the initial value		
	Dissipation factor(tanδ)	≒ 200% of the specified value		
	Leakage current	≒ The initial specified value		
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 25°C after exposing them for 1,000 hours at 105°C without voltage applied.			
	Capacitance change	≒ ±15% of the initial value		
	Dissipation factor(tanδ)	≒ 150% of the specified value		
	Leakage current	≒ The initial specified value		
Others	Conforms to JIS-C-5101-4 (1998), characteristic W			

DIMENSIONS (mm)

Terminal Code : ND : Standard

Terminal Code : K6 (ø35)



PART NUMBER SYSTEM(Example : 450V 270µF)

P I 2 W 2 7 1 M N D 3 0 4 0

Special Request

Size code(3040 : 30×40)

Terminal length code

Lead forming Type code

Capacitance tolerance code(M:±20%)

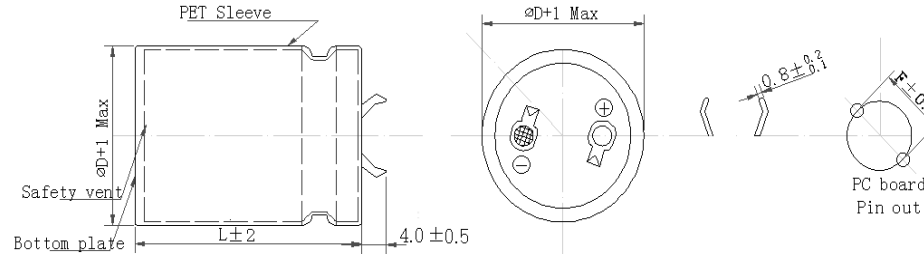
Capacitance code (270µF)

Voltage code (450V)

Series code (PI)

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	PI	NO.:	PUBLISH DATE	2022-03-25
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No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tan δ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (m Ω max/ 120Hz)	Impedance @20°C (m Ω max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F	
1	PI2S391MND3045EF5R	/	390 μ F	$\pm 20\%$	420 V	/	-25~+105	/	/	3500	/	770	/	5000	30	45	/	/	10	---

※ 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 F5 indicates the life of the capacitor is 5000 hrs.	张洪斌	曾爱娥	梁慧妍