

SF Series

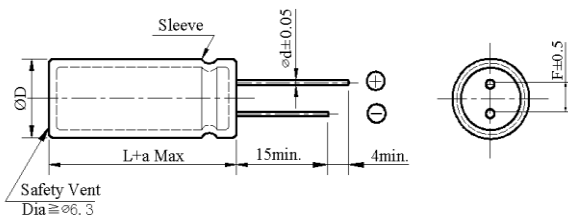
- Load life: 105°C 2,000 hours, 7mm height
- Design for space-saving and high density insertion
- Applications: VTR, car radio, car stereos, charger, et



◆ SPECIFICATIONS

Item	Performance Characteristics								
Category Temperature Range	-40 ~ +105°C								
Working Voltage Range	6.3 ~ 63Vdc								
Capacitance Range	0.1 ~ 220 µF								
Capacitance Tolerance	±20% (at 25°C and 120Hz)								
Dissipation Factor (tanδ) (at 25°C, 120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	
	tanδ(Max)	0.24	0.20	0.16	0.14	0.12	0.10	0.09	
Leakage Current	$I \leq 0.01CV$ or $3 \mu A$ I : Leakage current (µA) C : Rated capacitance (µF) V : Rated voltage (V) Impress the rated voltage for 1 minute								
Low Temperature Characteristics Impedance Ratio(MAX)	Rated voltage (V)	6.3	10	16	25	35	50	63	
	Z(-40°C)/Z(+20°C)	10	6	5	4	4	3	3	(at 120Hz)
Endurance	The following requirements shall be satisfied when the capacitor are restored to 25°C after the rated voltage applied for 2,000 hours at 105°C.								
	Capacitance change	$\cong \pm 20\%$ of the initial value							
	Dissipation factor(tanδ)	$\cong 200\%$ of the 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 105°C without voltage applied.								
	Capacitance change	$\cong \pm 20\%$ of the initial value							
	Dissipation factor(tanδ)	$\cong 200\%$ of the specified value							
Others	Conforms to JIS-C-5101-4 (1998), characteristic W								

◆ DIMENSIONS (mm)



ΦD	4	5	6.3	8×7
ΦD	ΦD + 0.5 Max			
Φd	0.45			
F	1.5	2.0	2.5	3.5
a	L + 1.0 Max			

◆ PART NUMBER SYSTEM (Example : 6.3V 100µF)

S F 0 J 1 0 1 M N N 6 3 0 7

Special Request

Size code (6307 : 6.3×7)

Lead length code

Lead forming Type code

Capacitance tolerance code(M: ±20%)

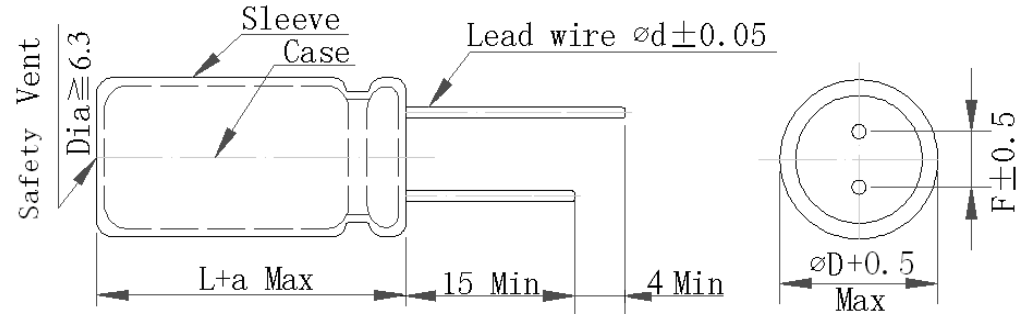
Capacitance code (100µF)

Voltage code (6.3V)

Series code (SF)

Aluminum Electrolytic Capacitor

Customer	Digi-Key	SERIES	SF	NO.:	PUBLISH DATE	2022-03-25
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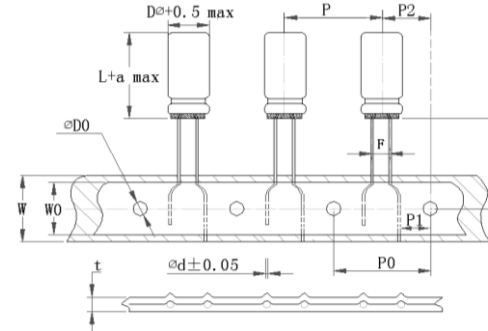
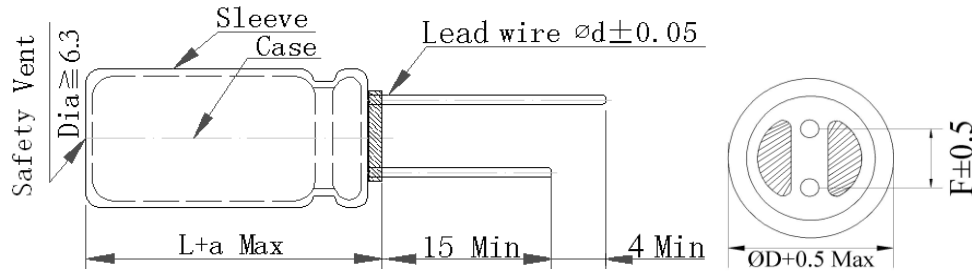
No.	CHINSAN Part No.	Customer Part No.	Capacitance (uF)	Tolerance On rated Capacitance (%)	Working Voltage (Vdc)	Surge Voltage (Vdc)	Category Temp Range (°C)	Tan δ @ 25°C (120Hz) (Max)	Leakage Current (uA) (2 min.)	Rated Ripple Current (mA rms) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	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	SFIH470MNN0807	/	47 μ F	$\pm 20\%$	50 V	/	-40~+105	/	/	95	/	/	/	2000	8	7	/	/	3.5	---

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

REMARKS:	APPROVED BY	CHECKED BY	PREPARED BY
Sleeve Color: Black.	张洪斌	曾爱娥	梁慧妍

Aluminum Electrolytic Capacitor

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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=3.5+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) @ 105°C 120Hz	Rated Ripple Current (mA rms) @ 105°C 100kHz	ESR @25°C (mΩ max/ 120Hz)	Impedance @20°C (mΩ max/ 100kHz)	Endurance @ 105°C (Hours)	Dimensions (mm)					Appearance Drawing No
															D Φ	L	a	d	F	
1	SF1C221MP30807RU	/	220 μF	±20%	16 V	/	-40~+105	/	/	223	/	/	/	2000	8	7	/	/	3.5	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