

SX Series

7(9)mmL(高) , -40°C+105°C

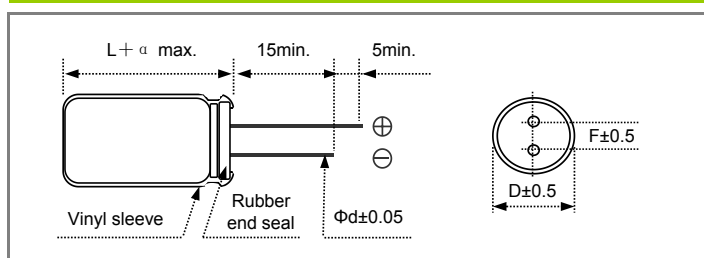
FEATURES 特点

- 1.Rated working voltage range 6.3 to 50V DC operation temperature range -40 to +105°C.
- 2.This series is for communication equipments ,switching power supply ,industrial measuring instruments ,automotive electric products ,etc .

SPECIFICATIONS 规格表

Item 项目	Performance Characteristics 特性参数									
Operation Temperature Range 工作温度范围	-40 to +105°C									
Rated Working Voltage Range 额定电压范围	6.3 to 50 VDC									
Nominal Capacitance Range 静电容量范围	0.1 to 330μF									
Capacitance Tolerance 静电容量允许偏差	±20%(120Hz, +20°C)									
Leakage Current 漏电流	LC≤0.01CV or 3(μA) Whichever is greater measured after 2 minutes application of rated working voltage at +20 °C 施加额定工作电压充电2分钟后读数，二者取大值。 [C：静电容量(uF)，V：额定电压(V)]									
Dissipaom Factor (tan δ) 损失角正切值 (120Hz, +20°C)	Working Voltage(v)	6.3	10	16	25		35	50		
	tan δ(max)	0.24	0.21	0.18	0.15		0.13	0.12		
Low Temperature characteristics 温度特性(阻抗比)	Impedance ratio max. at 120 Hz 阻抗比最大值									
	Working Voltage(V)	6.3	10	16	25		35	50		
	Z(-25°C)/ Z(+20°C)	4	2	2	2		2	2		
	Z(-40°C)/ Z(+20°C)	8	5	4	3		3	3		
High Temperature Loading (Endurance) 高温负荷寿命(耐久性)	Test conditions 试验条件					Post test requirements at +20°C 试验后特性应满足如下要求				
	Duration 持续时间	1,000 hours				Leakage current 漏电流	≤Initial specified value 初始规格值			
	Ambient temp. 环境温度	+105°C				Cap. Change 静电容量变化率	within ±20% of initial measured value 初始测试值的±20%内			
	Applied voltage 施加电压	DC voltage with maximum permissible ripple current specified at +105°C 施加直流电压与额定纹波电流(所加电压峰值 [DC+AC]不超过额定工作电压)				D.F.(tan δ) 损失角正切值	≤200% of initial specified value 2倍初始规格值			
						Before test requirement: Resumed 16 hours at normal temperature 测试前将电容在常温中放置16小时				
Shelf Life 高温储存寿命	Test conditions 试验条件					Post test requirements at +20°C 试验后特性应满足如下要求				
	Duration 持续时间	1,000 hours				Leakage current 漏电流	≤Initial specified value 初始规格值			
	Ambient temp. 环境温度	+105°C				Cap. Change 静电容量变化率	within ±20% of initial measured value 初始测试值的±20%内			
	Applied voltage 施加电压	(None) 无				D.F.(tan δ) 损失角正切值	≤200% of initial specified value 2倍初始规格值			
						♦(Before the measurements, the capacitor shall be pretreated by applying DC working voltage for 30min, after discharged and then stored under standard atmospheric conditions for 24-48 hours) 测试前应将电容在常温中施加工作电压30分钟，放电后在标准气压下放置24~48小时				
Other 其他	JIS C-5101 (IEC 60384)									

CASE SIZE TABLE 尺寸图 (Unit : mm)



ΦD	4	5	6.3	8(L=7)	8(L=9)
F	1.5	2.0	2.5	3.5	3.5
Φd	0.45				0.50
α	(L=7) 1		(L=9) 1.5		

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STANDARD RATINGS 标准品一览表

Voltage(Code)		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)	
Cap.(μF)	Code	Case Size	R.C	Case Size	R.C	Case Size	R.C	Case Size	R.C
0.1	0P1								
0.22	P22								
0.33	P33								
0.47	P47								
1	001								
2.2	2P2								
3.3	3P3								
4.7	4P7								
10	010					4×7	29	4×7	29
22	022	4×7	34	4×7	34	4×7	38	5×7	45
33	033	4×7	37	4×7	40	5×7	50	5×7	55
47	047	4×7	44	5×7	50	4×7	55	5×7	58
						5×7	60	6.3×7	67
100	101	5×7	67	5×7	80	5×7	85	6.3×7	95
				6.3×7	83	6.3×7	92		
220	221	6.3×7	112	6.3×7	100	6.3×7	95	8×7	158
				8×7	140				
330	331	8×9	135	8×9	150				
470	471			8×7	200				

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size ΦD x L(mm)

Voltage(Code)		35V(1V)		50V(1H)					
Cap.(μF)	Code	Case Size	R.C	Case Size	R.C				
0.1	0P1			4×7	1.0				
0.22	P22			4×7	2.3				
0.33	P33			4×7	3.5				
0.47	P47			4×7	5.0				
1	001			4×7	10				
2.2	2P2			4×7	19				
3.3	3P3			4×7	24				
4.7	4P7	4×7	24	4×7	29				
10	010	5×7	36	4×7	33				
				5×7	44				
22	022	5×7	57	6.3×7	65				
33	033	6.3×7	62						
47	047	6.3×7	78						
100	101	6.3×7	90						
		8×9	95						
220	221	8×9	100						

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size ΦD x L(mm)

Multiplier for Ripple Current vs. Frequency 纹波电流频率修正系数

Frequency Coefficient 频率系数

Cap(μF)	50 Hz	120Hz	300Hz	1KHz	10KHz~
≤47	0.75	1.00	1.35	1.57	2.00
68~470	0.80	1.00	1.23	1.34	1.50