

### Type: SX1

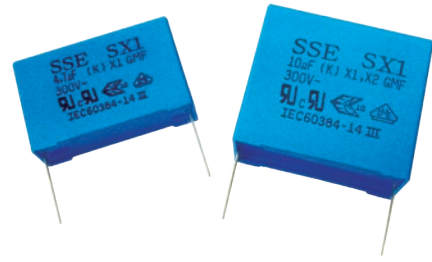
### Class X1 and X2 Capacitors

#### ● Safety Standards 安規

- UL and CUL – UL1414 and UL1283
- VDE – 0565 Teil 1-1 (IEC 60384-14 Ed. 3.0)
- ENEC – IEC 60384-14 Ed. 3.0
- CQC – GB/T14472-1998

#### ● Features 特性

- Provide interference suppression and safety approval.
- Self-healing characteristic.
- Active and passive flame retardant (UL94 V-0).
- 雜音抑制及電源跨接，通過多國安規認證。
- 具自愈性。
- 絕佳的阻燃防火功能 (UL94 V-0)。



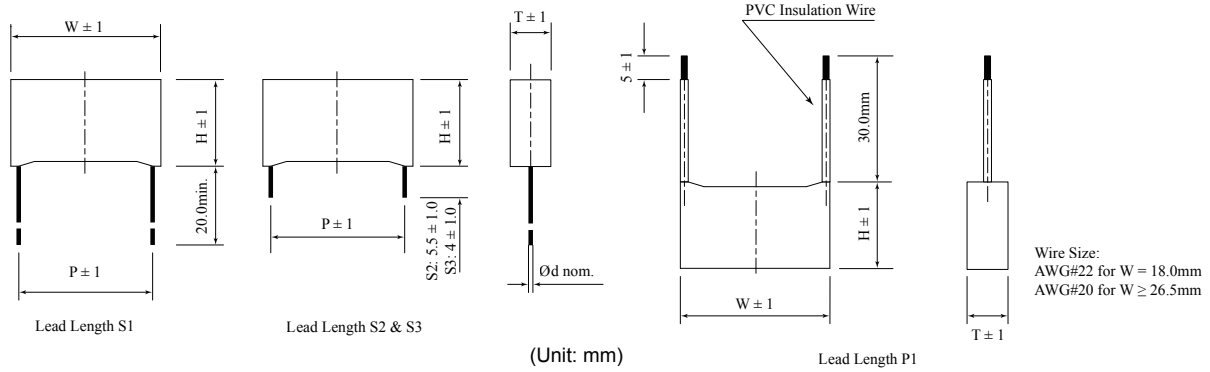
#### ● Applications 用途

- Line bypass, antenna coupling, across-the-line, and spark killer circuits.
- Available for EMI filter.
- Switching power supply application.
- Business appliances such as UPS, power supply, LCD monitor, adapter, etc.
- Household appliances such as blender, fan, air conditioner, washing machine, refrigerator, bread maker, audio, TV, etc.
- 電源雜音抑制、開關接點保護、火花消除、天線耦合及電源旁路使用。
- EMI 電磁濾波。
- 抑制開關電源時產生的突波電壓。
- 商用電器：不斷電系統、電源供應器、LCD顯示器、變壓器等等。
- 家庭電器：果汁機、電風扇、室內空調、洗衣機、電冰箱、製麵包機、音響、視聽產品等等。

#### ● Specifications 規格

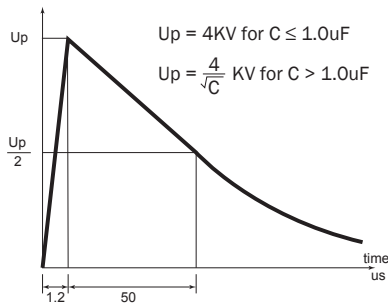
Rated Voltage 額定電壓	250VAC, 300VAC, 50/60Hz
Capacitance Range 電容量範圍	0.0022 ~ 10uF
Capacitance Tolerance 容量誤差	J(±5%), K(±10%), M(±20%)
Dissipation Factor(DF) 損耗因數	≤ 0.1% at 1KHz and 20°C
Withstand Voltage 耐電壓	1200VAC, 60Hz or 2200VDC 1sec
Insulation Resistance(IR) 絕緣阻抗	C ≤ 0.33uF, IR ≥ 30,000MΩ C > 0.33uF, IR ≥ 10,000MΩ / uF
Climatic Category: In accordance with DIN40040 GMF 環境類別	G = Minimum Limit Temperature...-40°C M = Maximum Limit Temperature...+100°C F = Humidity Category...Average relative humidity ≤ 75%, 95% for 30 days per year, continuously; 85% for the remaining days, occasionally.

## Dimensions 尺寸

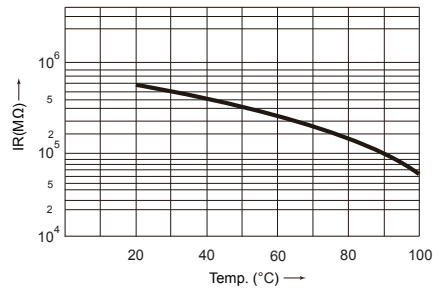


## Surge Voltage Test 突波電壓測試曲線圖

According to VDE 0565-1 and IEC 60384-14

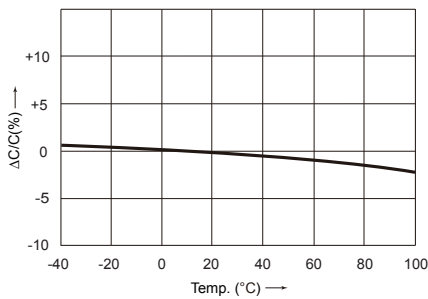


Insulation Resistance V.S. Temperature (Typical Values)

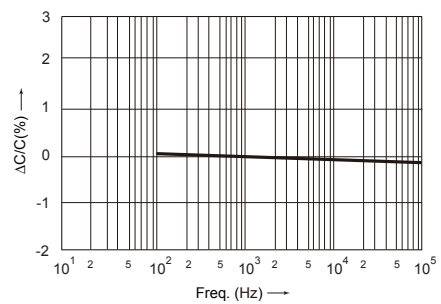


## Temperature and Frequency Characteristics 溫度與頻率特性曲線圖

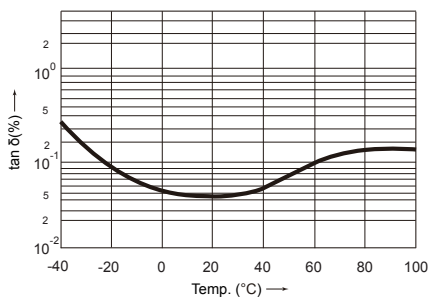
Capacitance Change V.S. Temperature (Typical Values)



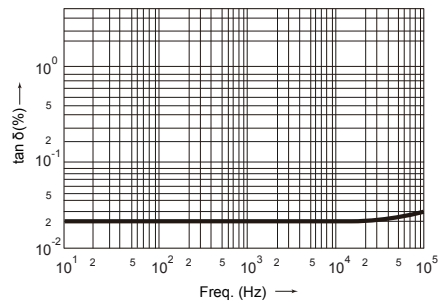
Capacitance Change V.S. Frequency (Typical Values)



Dissipation Factor V.S. Temperature at 10KHz (Typical Values)



Dissipation Factor V.S. Frequency (Typical Values)



### Case Size List 產品尺寸

Capacitance (UF)	Rated Voltage (VAC)	Dimensions(Unit: mm)									
		W		H		T		P		d	
0.0022	250/300	13		11		5		10		0.6	
0.0033	250/300	13		11		5		10		0.6	
0.0047	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.0056	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.0068	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.0082	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.01	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.012	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.015	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.018	250/300	18	13	10	11	5	5	15	10	0.8	0.6
0.022	250/300	18	13	12	11	6	5	15	10	0.8	0.6
0.027	250/300	18	13	10	12	5	6	15	10	0.8	0.6
0.033	250/300	18	13	10	12	5	6	15	10	0.8	0.6
0.039	250/300	18		10		5		15		0.8	
0.047	250/300	18		10		5		15		0.8	
0.056	250/300	18		12		6		15		0.8	
0.068	250/300	18		12		6		15		0.8	
0.082	250/300	18		12		6		15		0.8	
0.1	250/300	18	13	12		6		15	10	0.8	0.6
0.12	250/300	18		13.5		7.5		15		0.8	
* 0.15 / 0.15-1	250/300	18		14.5	13.5	8.5	7.5	15		0.8	
0.18 / 0.18-1	250/300	26.5	18	16.5	16.5	7	8.5	22.5	15	0.8	
* 0.22	250/300	26.5		16.5		7		22.5		0.8	
* 0.22 -1	250/300	18		16.5		8.5		15		0.8	
0.22 -2	250/300	17		15.5		7.5		15		0.8	
0.27	250/300	26.5		17		8.5		22.5		0.8	
* 0.33	250/300	26.5		17		8.5		22.5		0.8	
0.33 -1	250/300	17		16.5		9.5		15		0.8	
0.39	250/300	26.5		19		10		22.5		0.8	
0.47	250/300	31.5		20		11		27.5		0.8	
* 0.47	250/300	26.5		19		10		22.5		0.8	
0.47 -1	250/300	26.5		17		8.5		22.5		0.8	
0.47 -2	250/300	17		19		11		15		0.8	
0.56	250/300	31.5		20		11		27.5		0.8	
0.6	250/300	31.5		20		11		27.5		0.8	
* 0.68	250/300	31.5		20		11		27.5		0.8	
0.68-1	250/300	26.5		19		10		22.5		0.8	
0.82	250/300	31.5		22.5		13		27.5		0.8	
* 1.0	250/300	31.5		22.5		13		27.5		0.8	
1.0 -1	250/300	25		23.5		14		22.5		0.8	
1.0 -2	250/300	30		21		11.5		27.5		0.8	
* 1.2	300/300	37		24		13.5		32.5		0.8	
1.2 -1	300/300	31.5		22.5		13		27.5		0.8	
* 1.5	300/300	37		24		13.5		32.5		0.8	
1.5 -1	300/300	31.5		25		14		27.5		0.8	
1.8	300/300	37		26.5		16		32.5		0.8	
* 2.2	300/300	37		28.5		18		32.5		0.8	
2.2 -1 / 2.2-2	300/300	31	37	26	26.5	18	16	27.5	32.5	0.8	
2.7	300/300	37		28.5		18		32.5		0.8	
3.3	300/300	37		34		22		32.5		0.8	
3.9	300/300	37		34		22		32.5		0.8	
3.9 -1	300/300	51		30.5		20		47.5		0.8	
4.7	300/300	51		30.5		20		47.5		0.8	
5.6 / 6.0	300/300	51		34		22		47.5		0.8	
6.8	300/300	51		35		24		47.5		0.8	
10	300/300	51		43.5		29		47.5		0.8	

\* marks indicate mass production size. \*記號為大量生產尺寸。