SSE SX1

METALLIZED POLYPROPYLENE FILM CAPACITORS

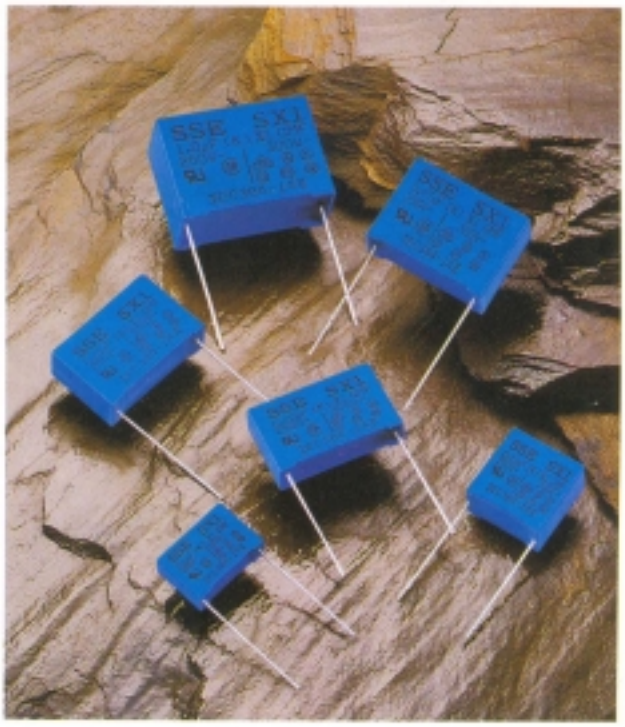
For Interference Suppression and Across-The-Line, Class X1

■ Introduction

SX1 are non-inductively wound with a metallized polypropylene film dielectric/electrode, encapsulated in flame retardant (UL94,V-0) plastic case and epoxy resin end seal.

Standard: EN132 400:1994/ICE384-14, 2nd Edition:1993/A1:1995 and UL1414, UL1283

SX1 **-S** Tinned copper clad steel wire radial leads.
-P UL 1015 or UL 1007 AWG#20~22 solid PVC insulation wire radial leads.



■ Applications

- Ideal for use in line bypass, antenna coupling, across-the-line and spark killer circuits.
- Available for EMI filter.
- Switching power supply applications.
- Business machines appliances, such as: typewriters, adding machines, computer displays and monitors.
- Household appliances, such as: mixers, fans, coffee grinders audio and TV circuits.
- Thyristor and triac appliances, such as: dimmers.

■ Features

- Provides interference suppression, all safety approval
- Overvoltage stress withstanding
- Self-healing properties
- Active and passive flame retardent

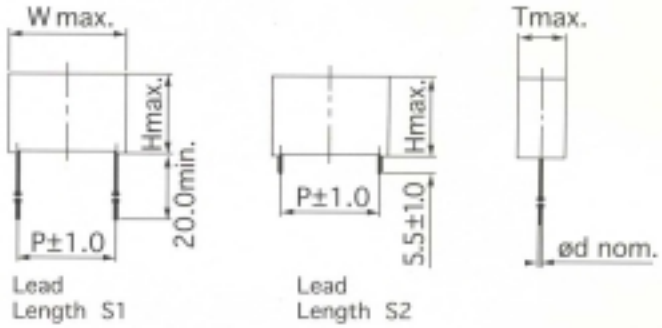
■ Specifications

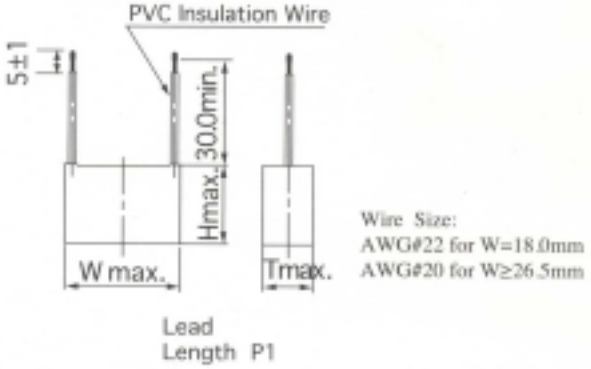
- **Climate Category:** In accordance with DIN40040 G P F GMF
  a) G = Minimum Limit Temperature ...-40°C
  b) P = Maximum Limit Temperature ...+85°C
  M= Maximum Limit Temperature ...**+100°C**
  c) F=Humidity Category ... Average relative humidity ≤75%, 95% for 30 days per year, continuously; 85% for the remaining days, occasionally.
- **Rated Voltage:** ..... 250V/275V, **300V·AC**, 50~60Hz
- **Capacitance Range:**..... **0.0047~10.0uF**
- **Capacitance Tolerance:** J(±5%), K(±10%), M(±20%)
- **Withstand Voltage:**
- a) Between Terminals..1200V·AC, 60Hz or 2200V·DC 1s.
  b) Between Terminals and Case.....2200V·AC, 60Hz 60s.
- **Dissipation Factor:**
  a) ≤0.1% at 1 KHz and 20°C
  b) ≤0.3% at 10 KHz and 20°C
- **Insulation Resistance:**
  a) Between Terminals .....≥3 x 10^4 MΩ for C≤0.33uF;
  ≥1 x 10^4 MΩ/uF for C>0.33uF
  b) Between Terminals and Case .....≥3 x 10^4 MΩ
  Measured at 100±15V·DC, 60s.and 20°C.

■ Diagram of Dimensions (Unit=mm)

Pitch and Lead Dimensions (mm)

W	18.0	26.5	31.5	37.5	51.0
P	15.0	22.5	27.5	32.5	47.5
dø	0.8	0.8	0.8	0.8	0.8





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■ Case Size of Standard Products

Capacitance	Rated-Voltage	DimAension in mm				
μF	VAC	W	H	T	P	d
0.0047	250/275/300	18	10	5	15	0.8
0.0056	250/275/300	18	10	5	15	0.8
0.0068	250/275/300	18	10	5	15	0.8
0.0082	250/275/300	18	10	5	15	0.8
0.01	250/275/300	18	10	5	15	0.8
0.012	250/275/300	18	10	5	15	0.8
0.015	250/275/300	18	10	5	15	0.8
0.018	250/275/300	18	10	5	15	0.8
0.022	250/275/300	18	12	6	15	0.8
0.027	250/275/300	18	10	5	15	0.8
0.033	250/275/300	18	10	5	15	0.8
0.039	250/275/300	18	10	5	15	0.8
0.047	250/275/300	18	10	5	15	0.8
0.056	250/275/300	18	12	6	15	0.8
0.068	250/275/300	18	12	6	15	0.8
0.082	250/275/300	18	12	6	15	0.8
0.1	250/275/300	18	12	6	15	0.8
0.12	250/275/300	18	13.5	7.5	15	0.8
0.15	250/275/300	18	14.5	8.5	15	0.8
0.18	250/275/300	26.5	16.5	7	22.5	0.8
* 0.22	250/275/300	26.5	16.5	7	22.5	0.8
0.22-1	250/275/300	18	16.5	8.5	15	0.8
0.22-2	250/275/300	17	15.5	7.5	15	0.8
0.27	250/275/300	26.5	17	8.5	22.5	0.8
* 0.33	250/275/300	26.5	17	8.5	22.5	0.8
0.33-1	250/275/300	17	16.5	9.5	15	0.8
0.39	250/275/300	26.5	19	10	22.5	0.8
* 0.47	250/275/300	26.5	19	10	22.5	0.8
0.47-1	250/275/300	26.5	17	8.5	22.5	0.8
0.47-2	250/275/300	17	19	11	15	0.8
0.56	250/275/300	31.5	20	11	27.5	0.8
0.6	250/275/300	31.5	20	11	27.5	0.8
0.68	250/275/300	31.5	20	11	27.5	0.8
0.68-1	250/275/300	26.5	19	10	22.5	0.8
0.82	250/275/300	31.5	22.5	13	27.5	0.8
1.0	250/275/300	31.5	22.5	13	27.5	0.8
1.2	300/300	37	24	13.5	32.5	0.8
1.5	300/300	37	24	13.5	32.5	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
2.7	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
6.8	300/300	51	35	24	47.5	0.8
10	300/300	51	43.5	29	47.5	0.8

*Mark means factory mass production size

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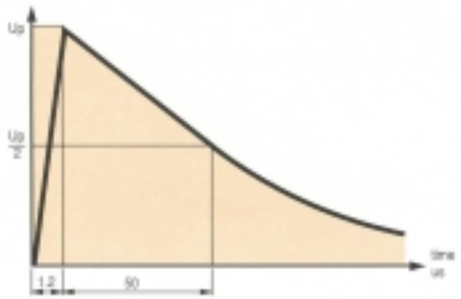
■ Surge Voltage Test

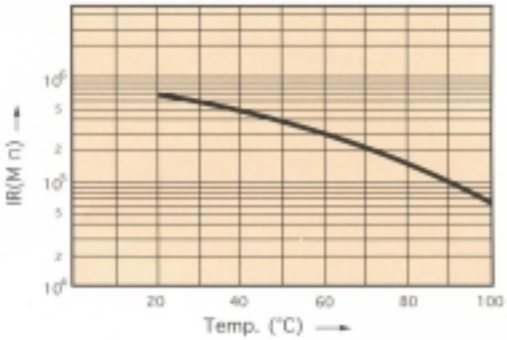
According to VDE 0565-1 and IEC 384-14:

Up=4KV for C≤1.0uF

Up= $\sqrt[4]{C}$ KV for C>1.0uF

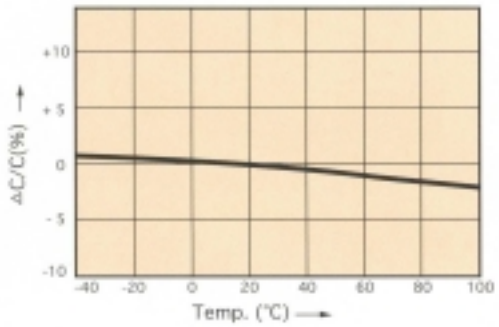


Insulation Resistance vs. Temperature (Typical Values)

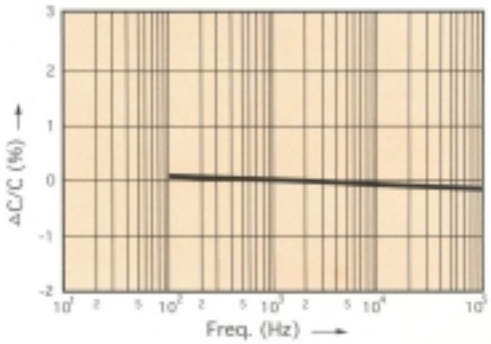


■ Temperature and Frequency Characteristics

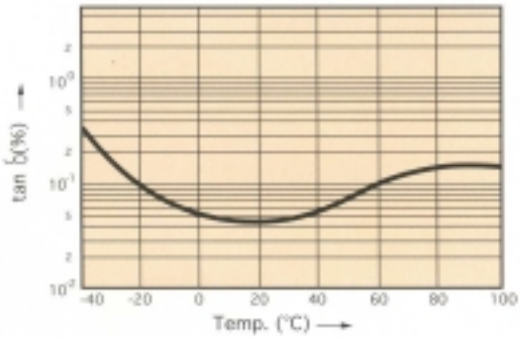
Capacitance Change vs. Temperature (Typical Values)



Capacitance Change vs. Frequency (Typical Values)



Dissipation Factor vs. Temperature at 10 KHz (Typical Values)



Dissipation Factor vs. Frequency (Typical Values)