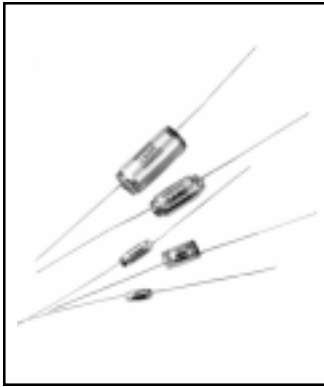


SX Series Polystyrene-Foil / Axial Leads

MALLORY

Film Capacitors



- Axial Leads
- High Q and Excellent Stability
- High Insulation, Low Absorption
- Low Dissipation Factor, Tight Temperature Coefficient
- Lead Material
Solder Coated or Tinned
Solid Wire

GENERAL SPECIFICATIONS

Operating Temperature:
-40° C to +70° C
(Derate 0.67% per °C
above 40° C)

Voltage Range:
40° C - 33 VDC to 630 VDC
70° C - 25 VDC to 500 VDC

Capacitance Range:
20 pF to .027 μ F

Tolerance Range:
 $\pm 2.5\%$, $\pm 5.0\%$, $\pm 10.0\%$

Total Self Inductance:
Body: 10 to 30 nH, function of
the body length
Leads: 10 nH/cm of length

Dielectric Withstand Voltage:
2.5 x Rated Voltage for 5 seconds
Charge and discharge
current ≤ 50 mA

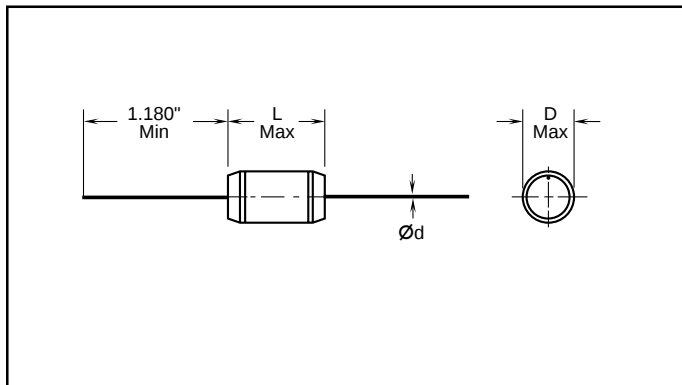
Dissipation Factor (DF):
Shall not be $> .05\%$

Ideally suited for precision
circuits such as sample and
hold, dual Slope Integration
and Temperature Compensation

Temperature Coefficient

For 33 VDC:	
	-125 $\pm$ 75 PPM/°C
For 63, 160, 630 VDC	
Capacitance Values ≤ 500 pF	-175 $\pm$ 75 PPM/°C
Capacitance Values > 500 pF	-125 $\pm$ 75 PPM/°C

Outline Dimensions



Specifications

Insulation Resistance (IR)

Shall be less than:
50,000 M Ω or 1000/C (M Ω) (C in MFD) whichever is
lower for 33 VDC at 10 VDC
100,000 M Ω or 2000/C (M Ω) (C in MFD) whichever is
lower for 63 VDC at 10 VDC
500,000 M Ω or 10,000/C (M Ω) (C in MFD) whichever is
lower for 160 to 630 VDC at 100 VDC

Dielectric Absorption:

Equal to or less than .02%

Capacitance Drift:

Equal to or less than $\pm 0.3\% + 0.4$ pF after thermal cycle
from +25°C to -25°C to +70°C and back to +25°C

Storage:

$\Delta C/C \leq \pm 0.5\% + .4$ pF for SXX, SXL
 $\Delta C/C \leq \pm 0.2\% + .4$ pF for SXM, SX

When stored in constant climate $\leq 70\%$ RH within operating temperature
range and stabilized at 40% RH 25°C $\pm 5^\circ$ C for 24 hours before measurements

Life Test:

125% of rated voltage for 250 hrs at 70°C

Soldering Conditions:

Not recommended for wave soldering
For manual soldering:
Solder Temperature: 270°C
Time: 4 seconds maximum
Distance from body: .236 inches minimum

Caution:

Exposure to temperatures $> 70^\circ$ C will result in serious degradation
Clean with de-ionized water only. Do not expose to solvents.

SX Series Polystyrene-Foil / Axial Leads

MALLORY

Old Catalog Number	Cap pF	% Tol.	Millimeters			New Catalog Number	% Tol.	Millimeters		
			D Max.	L Max.	Ød			D Max.	L Max.	Ød
33 WVDC @ +40°C 25 WVDC @ +70°C										
SXK310	100	2.5	4.6	8.0	.3	SXK310A	5.0	5.5	12.0	.4
SXK312	120	2.5	4.6	8.0	.3	SXK312A	5.0	5.5	12.0	.4
SXK318	180	2.5	4.6	8.0	.3	SXK318A	5.0	5.5	12.0	.4
SXK322	220	2.5	4.6	8.0	.3	SXK322A	5.0	5.5	12.0	.4
SXK327	270	2.5	4.6	8.0	.3	SXK327A	5.0	5.5	12.0	.4
SXK333	330	2.5	4.6	8.0	.3	SXK333A	5.0	5.5	12.0	.4
SXK339	390	2.5	4.6	8.0	.3	SXK339A	5.0	5.5	12.0	.4
SXK347	470	2.5	4.6	8.0	.3	SXK347A	2.5	5.5	12.0	.4
SXK356	560	2.5	4.6	8.0	.3	SXK356A	2.5	5.5	12.0	.4
SXK368	680	2.5	4.6	8.0	.3	SXK368A	2.5	5.5	12.0	.4
SXK382	820	2.5	4.6	8.0	.3	SXK382A	2.5	6.0	12.0	.4
SXK210	1000	2.5	4.6	8.0	.3	SXK210A	2.5	6.0	12.0	.4
SXK212	1200	2.5	6.6	12.0	.4	SXK212A	2.5	7.0	12.0	.4
SXK215	1500	2.5	6.6	12.0	.4	SXK215A	2.5	7.0	12.0	.4
SXK218	1800	2.5	6.6	12.0	.4	SXK218A	2.5	7.0	12.0	.4
SXK222	2200	2.5	6.6	12.0	.4	SXK222A	2.5	7.0	12.0	.4
SXK227	2700	2.5	6.6	12.0	.4	SXK227A	2.5	7.0	12.0	.4
SXK233	3300	2.5	6.6	12.0	.4	SXK233A	2.5	7.0	12.0	.4
SXK239	3900	2.5	6.6	12.0	.4	SXK239A	2.5	7.5	12.0	.4
SXK247	4700	2.5	6.6	12.0	.4	SXK247A	2.5	8.0	12.0	.4
SXK256	5600	2.5	11.9	17.0	.5	SXK256A	2.5	10.0	12.0	.4
SXK268	6800	2.5	11.9	17.0	.5	SXK268A	2.5	10.0	15.0	.4
SXK282	8200	2.5	11.9	17.0	.5	SXK282A	2.5	11.0	15.0	.4
SXK110	10,000	2.5	11.9	17.0	.5	SXK110A	2.5	11.0	15.0	.4
SXK112	12,000	2.5	11.9	17.0	.5	Not Available				
SXK115	15,000	2.5	11.9	17.0	.5	Not Available				
SXK118	18,000	2.5	11.9	17.0	.5	SXK118A	2.5	12.0	17.0	.5
SXK122	22,000	2.5	11.9	17.0	.5	SXK122A	2.5	12.0	17.0	.5
SXK125	25,000	2.5	11.9	17.0	.5	Not Available				
SXK127	27,000	2.5	11.9	17.0	.5	SXK127A	2.5	12.0	17.0	.5
SXK133	33,000	2.5	18.0	22.0	.5	Not Available				
SXK139	39,000	2.5	18.0	22.0	.5	Not Available				
SXK147	47,000	2.5	18.0	22.0	.5	Not Available				
SXK156	56,000	2.5	18.0	22.0	.5	Not Available				
SXK168	68,000	2.5	18.0	22.0	.5	Not Available				
SXK182	82,000	2.5	18.0	22.0	.5	Not Available				
SXK010	.1µF	2.5	18.0	22.0	.5	Not Available				

Old Catalog Number	Cap pF	% Tol.	Millimeters			New Catalog Number	% Tol.	Millimeters		
			D Max.	L Max.	Ød			D Max.	L Max.	Ød
63 WVDC @ +40°C 50 WVDC @ +70°C										
SXL482	82	2.5	4.8	8.0	.3	Not Available				
SXL310	100	2.5	4.8	8.0	.3	SXL310A	5.0	6.0	12.0	.4
SXL315	150	2.5	4.8	8.0	.3	SXL315A	5.0	6.0	12.0	.4
SXL318	180	2.5	4.8	8.0	.3	SXL318A	5.0	5.5	12.0	.4
SXL322	220	2.5	4.8	8.0	.3	SXL322A	5.0	5.5	12.0	.4
SXL327	270	2.5	4.8	8.0	.3	SXL327A	5.0	5.5	12.0	.4
SXL333	330	2.5	4.8	8.0	.3	SXL333A	5.0	5.5	12.0	.4
SXL347	470	2.5	4.8	8.0	.3	SXL347A	2.5	5.5	12.0	.4
SXL356	560	2.5	4.8	8.0	.3	SXL356A	2.5	5.5	12.0	.4
SXL368	680	2.5	4.8	8.0	.3	SXL368A	2.5	5.5	12.0	.4
SXL210	1000	2.5	8.4	12.0	.3	SXL210A	2.5	6.0	12.0	.4
SXL212	1200	2.5	8.4	12.0	.4	SXL212A	2.5	7.0	12.0	.4
SXL215	1500	2.5	8.4	12.0	.4	SXL215A	2.5	7.0	12.0	.4
SXL218	1800	2.5	8.4	12.0	.4	SXL218A	2.5	7.0	12.0	.4
SXL222	2200	2.5	8.4	12.0	.4	SXL222A	2.5	7.0	12.0	.4
SXL227	2700	2.5	8.4	12.0	.4	SXL227A	2.5	7.0	12.0	.4
SXL233	3300	2.5	8.4	12.0	.4	SXL233A	2.5	7.0	12.0	.4
SXL239	3900	2.5	8.4	12.0	.4	SXL239A	2.5	7.5	12.0	.4
SXL247	4700	2.5	8.4	12.0	.4	SXL247A	2.5	10.0	12.0	.4
SXL256	5600	2.5	8.6	17.0	.5	SXL256A	2.5	10.0	12.0	.4
SXL268	6800	2.5	8.6	17.0	.5	SXL268A	2.5	10.0	15.0	.4
SXL282	8200	2.5	8.6	17.0	.5	SXL282A	2.5	11.0	15.0	.4
SXL110	10,000	2.5	8.6	17.0	.5	SXL110A	2.5	11.0	15.0	.4
SXL112	12,000	2.5	10.9	22.0	.5	Not Available				
SXL115	15,000	2.5	10.9	22.0	.5	SXL115A	2.5	2.0	17.0	.5
SXL116	16,000	2.5	10.9	22.0	.5	Not Available				
SXL120	20,000	2.5	10.9	22.0	.5	Not Available				
SXL122	22,000	2.5	10.9	22.0	.5	Not Available				

SX Series Polystyrene-Foil / Axial Leads

MALLORY

Old Catalog Number	Cap pF	% Tol.	Millimeters			New Catalog Number	% Tol.	Millimeters		
			D Max.	L Max.	Ød			D Max.	L Max.	Ød

**160 WVDC @ +40°C
125 WVDC @ +70°C**

SXM420	20	2.5	6.1	8.0	.3	SXM420A	10.0	6.0	12.0	.4
SXM427	27	2.5	6.1	8.0	.3	Not Available				
SXM433	33	2.5	6.1	8.0	.3	Not Available				
SXM439	39	2.5	6.1	8.0	.3	Not Available				
SXM447	47	2.5	6.1	8.0	.3	SXM447A	10.0	6.0	12.0	.4
SXM456	56	2.5	6.1	8.0	.3	Not Available				
SXM468	68	2.5	6.1	8.0	.3	Not Available				
SXM482	82	2.5	6.1	8.0	.3	Not Available				
SXM310	100	2.5	6.1	8.0	.3	SXM310A	5.0	5.5	12.0	.4
SXM312	120	2.5	6.1	8.0	.3	SXM312A	5.0	5.5	12.0	.4
SXM315	150	2.5	6.1	8.0	.3	SXM315A	5.0	5.5	12.0	.4
SXM318	180	2.5	6.1	8.0	.3	SXM318A	5.0	5.5	12.0	.4
SXM322	220	2.5	6.1	8.0	.3	SXM322A	5.0	5.5	12.0	.4
SXM327	270	2.5	6.1	8.0	.3	SXM327A	5.0	5.5	12.0	.4
SXM330	300	2.5	6.1	8.0	.3	SXM330A	5.0	5.5	12.0	.4
SXM333	330	2.5	6.1	8.0	.3	SXM333A	5.0	5.5	12.0	.4
SXM336	360	2.5	6.1	8.0	.3	SXM336A	5.0	5.5	12.0	.4
SXM339	390	2.5	6.1	8.0	.3	SXM339A	5.0	5.5	12.0	.4
SXM343	430	2.5	6.1	8.0	.3	SXM343A	5.0	5.5	12.0	.4
SXM347	470	2.5	6.1	8.0	.3	SXM347A	2.5	5.5	12.0	.4
SXM350	500	2.5	6.1	8.0	.3	SXM350A	2.5	5.5	12.0	.4
SXM351	510	2.5	6.1	8.0	.3	SXM351A	2.5	5.5	12.0	.4
SXM356	560	2.5	6.1	8.0	.3	SXM356A	2.5	5.5	12.0	.4
SXM360	600	2.5	6.1	8.0	.3	SXM360A	2.5	5.5	12.0	.4
SXM362	620	2.5	7.6	12.0	.4	SXM362A	2.5	6.0	12.0	.4
SXM368	680	2.5	7.6	12.0	.4	SXM368A	2.5	6.0	12.0	.4
SXM375	750	2.5	7.6	12.0	.4	SXM375A	2.5	6.0	12.0	.4
SXM382	820	2.5	7.6	12.0	.4	SXM382A	2.5	6.5	12.0	.4
SXM391	910	2.5	7.6	12.0	.4	SXM391A	2.5	7.5	12.0	.4
SXM210	1000	2.5	7.6	12.0	.4	SXM210A	2.5	7.5	12.0	.4
SXM211	1100	2.5	7.6	12.0	.4	SXM211A	2.5	7.5	12.0	.4
SXM212	1200	2.5	7.6	12.0	.4	SXM212A	2.5	7.5	12.0	.4
SXM213	1300	2.5	7.6	12.0	.4	SXM213A	2.5	7.5	12.0	.4
SXM215	1500	2.5	7.6	12.0	.4	SXM215A	2.5	7.5	12.0	.4
SXM216	1600	2.5	7.6	12.0	.4	SXM216A	2.5	7.5	12.0	.4
SXM218	1800	2.5	7.6	12.0	.4	SXM218A	2.5	7.5	12.0	.4
SXM220	2000	2.5	7.6	12.0	.4	SXM220A	2.5	7.5	12.0	.4
SXM222	2200	2.5	9.4	17.0	.5	SXM222A	2.5	7.5	12.0	.4
SXM224	2400	2.5	9.4	17.0	.5	SXM224A	2.5	9.0	12.0	.4
SXM227	2700	2.5	9.4	17.0	.5	SXM227A	2.5	9.0	12.0	.4
SXM230	3000	2.5	9.4	17.0	.5	SXM230A	2.5	9.0	15.0	.4
SXM233	3300	2.5	9.4	17.0	.5	SXM233A	2.5	9.5	15.0	.4
SXM236	3600	2.5	9.4	17.0	.5	SXM236A	2.5	9.5	15.0	.4
SXM239	3900	2.5	9.4	17.0	.5	SXM239A	2.5	9.5	15.0	.4
SXM243	4300	2.5	9.4	17.0	.5	SXM243A	2.5	9.5	15.0	.4
SXM247	4700	2.5	9.4	17.0	.5	SXM247A	2.5	9.5	15.0	.4
SXM250	5000	2.5	9.4	17.0	.5	SXM250A	2.5	9.5	15.0	.4
SXM251	5100	2.5	11.9	22.0	.5	SXM251A	2.5	12.0	16.0	.4
SXM256	5600	2.5	11.9	22.0	.5	SXM256A	2.5	12.0	16.0	.4
SXM262	6200	2.5	11.9	22.0	.5	SXM262A	2.5	12.0	16.0	.4
SXM268	6800	2.5	11.9	22.0	.5	SXM268A	2.5	12.0	16.0	.4
SXM275	7500	2.5	11.9	22.0	.5	SXM275A	2.5	12.0	17.0	.4
SXM282	8200	2.5	11.9	22.0	.5	SXM282A	2.5	12.0	17.0	.4
SXM110	10,000	2.5	11.9	22.0	.5	SXM110A	2.5	12.0	17.0	.4
SXM112	12,000	2.5	11.9	22.0	.5	Not Available				
SXM113	13,000	2.5	11.9	22.0	.5	Not Available				
SXM115	15,000	2.5	11.9	22.0	.5	Not Available				
SXM118	18,000	2.5	13.5	32.0	.5	Not Available				
SXM122	22,000	2.5	13.5	32.0	.5	Not Available				
SXM124	24,000	2.5	13.5	32.0	.5	Not Available				

Old Catalog Number	Cap pF	% Tol.	Millimeters			New Catalog Number	% Tol.	Millimeters		
			D Max.	L Max.	Ød			D Max.	L Max.	Ød

**630 WVDC @ +40°C
500 WVDC @ +70°C**

SX420	20	5.0	7.1	12.0	.4	SX420A	10.0	6.0	12.0	.4
SX422	22	5.0	7.1	12.0	.4	SX422A	10.0	6.0	12.0	.4
SX424	24	5.0	7.1	12.0	.4	SX424A	10.0	6.0	12.0	.4
SX430	30	5.0	7.1	12.0	.4	SX430A	10.0	6.0	12.0	.4
SX433	33	5.0	7.1	12.0	.4	SX433A	10.0	6.0	12.0	.4
SX436	36	5.0	7.1	12.0	.4	SX436A	10.0	6.0	12.0	.4
SX439	39	5.0	7.1	12.0	.4	SX439A	10.0	6.0	12.0	.4
SX443	43	5.0	7.1	12.0	.4	SX443A	10.0	6.0	12.0	.4
SX447	47	5.0	7.1	12.0	.4	SX447A	10.0	6.0	12.0	.4
SX456	56	5.0	7.1	12.0	.4	SX456A	10.0	6.0	12.0	.4
SX462	62	5.0	7.1	12.0	.4	SX462A	10.0	6.0	12.0	.4
SX468	68	5.0	7.1	12.0	.4	SX468A	10.0	6.0	12.0	.4
SX475	75	5.0	7.1	12.0	.4	Not Available				
SX482	82	5.0	7.1	12.0	.4					
SX491	91	5.0	7.1	12.0	.4					
SX310	100	5.0	7.1	12.0	.4	SX310A	5.0	5.5	12.0	.4
SX311	110	5.0	7.1	12.0	.4	SX311A	5.0	5.5	12.0	.4
SX312	120	5.0	7.1	12.0	.4	SX312A	5.0	5.5	12.0	.4
SX313	130	5.0	7.1	12.0	.4	SX313A	5.0	5.5	12.0	.4
SX315	150	5.0	7.1	12.0	.4	SX315A	5.0	6.0	12.0	.4
SX318	180	5.0	7.1	12.0	.4	SX318A	5.0	6.0	12.0	.4
SX320	200	5.0	7.1	12.0	.4	SX320A	5.0	6.0	12.0	.4
SX322	220	5.0	7.1	12.0	.4	SX322A	5.0	6.0	12.0	.4
SX324	240	5.0	7.1	12.0	.4	SX324A	5.0	6.0	12.0	.4
SX327	270	5.0	7.1	12.0	.4	SX327A	5.0	6.0	12.0	.4
SX330	300	5.0	7.1	12.0	.4	SX330A	5.0	6.5	12.0	.4
SX333	330	5.0	7.1	12.0	.4	SX333A	5.0	6.5	12.0	.4
SX336	360	5.0	7.1	12.0	.4	SX336A	5.0	6.5	12.0	.4
SX339	390	5.0	7.1	12.0	.4	SX339A	5.0	6.5	12.0	.4
SX343	430	5.0	7.1	12.0	.4	SX343A	5.0	6.5	12.0	.4
SX347	470	5.0	7.1	12.0	.4	SX347A	5.0	7.0	12.0	.4
SX351	510	5.0	10.2	17.0	.5	SX351A	5.0	10.0	12.0	.4
SX356	560	5.0	10.2	17.0	.5	SX356A	5.0	10.0	12.0	.4
SX362	620	5.0	10.2	17.0	.5	SX362A	5.0	10.0	12.0	.4
SX368	680	5.0	10.2	17.0	.5	SX368A	5.0	10.0	12.0	.4
SX375	750	5.0	10.2	17.0	.5	SX375A	5.0	10.0	12.0	.4
SX382	820	5.0	10.2	17.0	.5	SX382A	5.0	10.0	12.0	.4
SX210	1000	5.0	10.2	17.0	.5	SX210A	5.0	10.0	12.0	.4
SX211	1100	5.0	10.2	17.0	.5	SX211A	5.0	10.0	15.0	.4
SX212	1200	5.0	10.2	17.0	.5	SX212A	5.0	10.0	15.0	.4
SX213	1300	5.0	10.2	17.0	.5	SX213A	5.0	10.0	15.0	.4
SX215	1500	5.0	10.2	17.0	.5	SX215A	5.0	10.0	15.0	.4
SX218	1800	5.0	10.2	17.0	.5	SX218A	5.0	10.0	17.0	.4
SX220	2000	5.0	10.2	17.0	.5	SX220A	5.0	10.0	17.0	.4
SX222	2200	5.0	10.2	17.0	.5	SX222A	5.0	10.0	17.0	.4
SX224	2400	5.0	10.2	17.0	.5	SX224A	5.0	10.0	17.0	.4
SX225	2500	5.0	10.2	17.0	.5	SX225A	5.0	10.0	17.0	.4
SX227	2700	5.0	10.2	17.0	.5	SX227A	5.0	10.0	17.0	.4
SX230	3000	5.0	10.2	17.0	.5	SX230A	5.0	10.0	17.0	.4
SX233	3300	5.0	15.0	22.0	.5	SX233A	5.0	10.0	17.0	.4
SX236	3600	5.0	15.0	22.0	.5	SX236A	5.0	10.0	17.0	.4
SX239	3900	5.0	15.0	22.0	.5	SX239A	5.0	10.0	17.0	.4
SX243	4300	5.0	15.0	22.0	.5	SX243A	5.0	10.0	17.0	.4
SX247	4700	5.0	15.0	22.0	.5	SX247A	5.0	15.0	17.0	.5
SX250	5000	5.0	15.0	22.0	.5	SX250A	5.0	15.0	17.0	.5
SX251	5100	5.0	15.0	22.0	.5	SX251A	5.0	15.0	17.0	.5
SX256	5600	5.0	15.0	22.0	.5	SX256A	5.0	15.0	17.0	.5
SX262	6200	5.0	15.0	22.0	.5	SX262A	5.0	15.0	17.0	.5
SX268	6800	5.0	15.0	22.0	.5	SX268A	5.0	15.0	17.0	.5
SX275	7500	5.0	15.0	22.0	.5	SX275A	5.0	15.0	22.0	.5
SX282	8200	5.0	15.0	22.0	.5	SX282A	5.0	15.0	22.0	.5
SX291	9100	5.0	15.0	22.0	.5	SX291A	5.0	15.0	22.0	.5
SX110	10,000	5.0	15.0	22.0	.5	SX110A	5.0	15.0	22.0	.5
SX122	22,000	5.0	18.0	32.0	.5	Not Available				