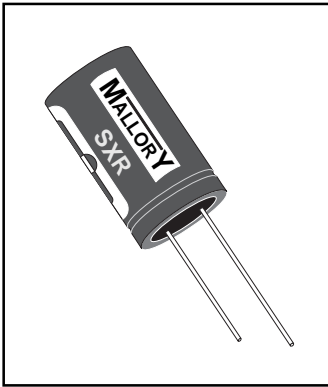


# Type SXR Radial Leaded Capacitors



- Low Impedance
- Low ESR
- High Ripple
- Long Life
- 2000 Hour Load Life For Dia  $\leq$  8mm; 3000 Hours for 10mm Dia
- 5000 Hour Load Life For Dia  $\geq$  12mm
- Ideal in Applications for Output Switching Power Supplies

## GENERAL SPECIFICATIONS

Operating Temperature:  
-40°C to +105°C

Voltage Range:  
6.3 WVDC to 100 WVDC

Capacitance Range:  
22  $\mu$ F to 15000  $\mu$ F

Capacitance Tolerance:  
 $\pm$ 20%

DC Leakage Current:  
I = .01CV after 2 minutes  
C = Capacitance in  $\mu$ F  
V = Rated Voltage  
I = Leakage Current in  $\mu$ A

QA Stability Test:  
Apply WVDC for 1,000 hrs for Dia  $\leq$  8, 2,000 hrs for Dia = 10, 5000 Hours For Dia  $\geq$  12mm (at 105°C)

- Capacitance Change: 20% of initial limits
- DC leakage current meets initial limits
- ESR  $\leq$  200% of initial value

Shelf Life:  
1,000 hrs - no voltage applied at 105°C

- Capacitance Change: 20% from initial limits
- DC leakage current meets initial limits
- ESR  $\leq$  200% of initial value

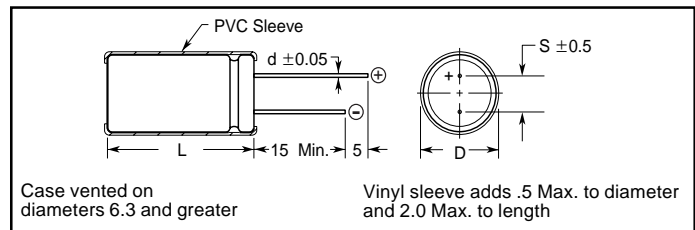
SXR parts are available taped in Ammo pack and taped and reeled. See page 124 for details.

The maximum ripple current at 105°C and 100 kHz for SXR capacitors is shown in the Standard Rating Table. Maximum ripple current may be adjusted by the multipliers in the following tables.

Temperature (C)	65	75	85	95	105
Multiplier	2.12	1.92	1.69	1.50	1.00

Rated WVDC	Ripple Multipliers					
	60Hz	120Hz	400Hz	1kHz	10kHz	100kHz
10 - 16	.45	.60	.83	.94	.98	1.00
25 - 35	.38	.50	.75	.90	.97	1.00
50 - 100	.36	.46	.70	.88	.94	1.00

## Outline Dimensions (Millimeters)



Dissipation Factor @ 120Hz, 25°C									
WV (V)	6.3	10	16	25	35	50	63	80	100
DF(%)	22	19	16	14	12	10	8	8	7

For capacitors whose capacitance value exceeds 1000 $\mu$ F, the value of DF(%) is increased 2% for every additional 1000 $\mu$ F.

Cap $\mu$ F	Max ESR Ohms 100KHz 25°C	Max Ripple mA 100KHz 105°C	Max LC $\mu$ A 2 Minutes	Size (Millimeters)				New Catalog Number	Previous Catalog Number
				D Diameter	L Length	S Lead Space	d		
<b>6.3 WVDC; 8 VDC Surge</b>									
120	2.43	154	7.6	5	11	2	0.5	SXR121M6R3ST	
150	1.95	210	9.5	6	11	2.5	0.5	SXR151M6R3ST	
220	1.33	260	13.9	8	11	3.5	0.5	SXR221M6R3ST	
330	0.88	350	20.8	8	11	3.5	0.5	SXR331M6R3ST	
470	0.62	510	29.6	10	12	5	0.6	SXR471M6R3ST	
680	0.43	635	42.8	10	16	5	0.6	SXR681M6R3ST	
820	0.36	650	51.7	10	16	5	0.6	SXR821M6R3ST	
1000	0.29	860	63.0	10	20	5	0.6	SXR102M6R3ST	
1200	0.24	860	75.6	10	20	5	0.6	SXR122M6R3ST	
1500	0.20	1030	94.5	10	25	5	0.6	SXR152M6R3ST	
3300	0.10	1280	207.9	12	35	5	0.6	SXR332M6R3ST	
4700	0.08	1770	296.1	12	35	5	0.6	SXR472M6R3ST	
6800	0.07	1810	428.4	16	32	7.5	0.8	SXR682M6R3ST	
8200	0.06	2030	516.6	16	36	7.5	0.8	SXR822M6R3ST	
10000	0.05	2320	630.0	16	40	7.5	0.8	SXR103M6R3ST	
15000	0.04	2460	945.0	18	40	7.5	0.8	SXR153M6R3ST	

# Type SXR Radial Leaded Capacitors



Cap $\mu$ F	Max ESR Ohms 100kHz 25°C	Max Ripple mA 100kHz 105°C	Max LC $\mu$ A 2 Minutes	Size (Millimeters)				New Catalog Number	Previous Catalog Number
				D Diameter	L Length	S Lead Space	d		
<b>10 WVDC; 13 VDC Surge</b>									
100	2.52	180	10.0	6	11	2.5	0.5	SXR101M010ST	
120	2.10	210	12.0	6	11	2.5	0.5	SXR121M010ST	
150	1.68	240	15.0	6	11	2.5	0.5	SXR151M010ST	
220	1.15	300	22.0	8	11	3.5	0.5	SXR221M010ST	WGR221M1AF16V
330	0.76	400	33.0	8	12	3.5	0.5	SXR331M010ST	WGR331M1AF16V
470	0.54	500	47.0	10	12	5	0.6	SXR471M010ST	WGR471M1AG18V
680	0.37	650	68.0	10	16	5	0.6	SXR681M010ST	WGR681M1AG21V
820	0.31	860	82.0	10	20	5	0.6	SXR821M010ST	
1000	0.25	970	100.0	10	20	5	0.6	SXR102M010ST	
1200	0.21	1030	120.0	10	25	5	0.6	SXR122M010ST	
1500	0.18	1150	150.0	10	30	5	0.6	SXR152M010ST	
2200	0.13	1320	220.0	12	30	5	0.6	SXR222M010ST	WGR222M1AJ26V
3300	0.09	1770	330.0	12	35	5	0.6	SXR332M010ST	WGR332M1AJ31V
4700	0.08	1810	470.0	16	32	7.5	0.8	SXR472M010ST	WGR472M1AJ41V
6800	0.06	2030	680.0	16	36	7.5	0.8	SXR682M010ST	
10000	0.05	2460	1000.0	18	40	7.5	0.8	SXR103M010ST	
<b>16 WVDC; 20 VDC Surge</b>									
100	2.12	230	16.0	8	16	3.5	0.5	SXR101M016ST	WGR101M1CF16V
120	1.77	260	19.2	8	11	3.5	0.5	SXR121M016ST	
150	1.42	300	24.0	8	11	3.5	0.5	SXR151M016ST	
220	0.97	400	35.2	8	11	3.5	0.5	SXR221M016ST	WGR221M1CG18V
330	0.64	500	52.8	10	12	5	0.6	SXR331M016ST	WGR331M1CG18V
470	0.45	650	75.2	10	16	5	0.6	SXR471M016ST	WGR471M1CG21V
680	0.31	860	108.8	10	20	5	0.6	SXR681M016ST	WGR681M1CG26V
820	0.26	1030	131.2	10	25	5	0.6	SXR821M016ST	
1000	0.21	1150	160.0	10	30	5	0.6	SXR102M016ST	WGR102M1CJ26V
1200	0.18	1120	192.0	12	25	5	0.6	SXR122M016ST	
1500	0.15	1320	240.0	12	25	5	0.6	SXR152M016ST	
2200	0.11	1540	352.0	12	30	5	0.6	SXR222M016ST	WGR222M1CJ31V
3300	0.08	1980	528.0	12	40	5	0.6	SXR332M016ST	WGR332M1CJ41V
4700	0.07	2030	752.0	16	36	7.5	0.8	SXR472M016ST	WGR472M1CK42V
6800	0.05	2240	1088.0	18	36	7.5	0.8	SXR682M016ST	
8200	0.05	2460	1312.0	18	40	7.5	0.8	SXR822M016ST	
<b>25 WVDC; 32 VDC Surge</b>									
100	1.86	300	25.0	8	16	3.5	0.5	SXR101M025ST	WGR101M1EF16V
120	1.55	350	30.0	8	11	3.5	0.5	SXR121M025ST	
150	1.24	400	37.5	10	12	5	0.6	SXR151M025ST	
220	0.84	500	55.0	10	12	5	0.6	SXR221M025ST	WGR221M1EG18V
330	0.56	650	82.5	10	16	5	0.6	SXR331M025ST	WGR331M1EG21V
470	0.40	860	117.5	10	20	5	0.6	SXR471M025ST	WGR471M1EG26V
680	0.27	1150	170.0	10	30	5	0.6	SXR681M025ST	WGR681M1EJ26V
820	0.23	1120	205.0	12	25	5	0.6	SXR821M025ST	
1000	0.19	1320	250.0	12	25	5	0.6	SXR102M025ST	
1200	0.15	1400	300.0	12	30	5	0.6	SXR122M025ST	
1500	0.13	1540	375.0	12	30	5	0.6	SXR152M025ST	
2200	0.10	1980	550.0	12	40	5	0.6	SXR222M025ST	
3300	0.07	2030	825.0	16	36	7.5	0.8	SXR332M025ST	WGR332M1EK42V
4700	0.06	2460	1175.0	18	40	7.5	0.8	SXR472M025ST	

Aluminum Capacitors

# Type SXR Radial Leaded Capacitors



Aluminum Capacitors

Cap μF	Max ESR Ohms 100kHz 25°C	Max Ripple mA 100kHz 105°C	Max LC μA 2 Minutes	Size (Millimeters)				New Catalog Number	Previous Catalog Number
				D Diameter	L Length	S Lead Space	d		
<b>35 WVDC; 44 VDC Surge</b>									
100	1.59	400	35.0	10	12	5	0.6	SXR101M035ST	WGR101M1VF16V
120	1.33	510	42.0	10	12	5	0.6	SXR121M035ST	
150	1.06	550	52.5	10	12	5	0.6	SXR151M035ST	WGR151M035
220	0.72	650	77.0	10	16	5	0.6	SXR221M035ST	WGR221M1VG21V
330	0.48	860	115.5	10	20	5	0.6	SXR331M035ST	WGR331M1VG26V
470	0.34	1150	164.5	10	30	5	0.6	SXR471M035ST	WGR471M1VJ26V
680	0.23	1320	238.0	12	25	5	0.6	SXR681M035ST	WGR681M1VJ31V
820	0.19	1400	287.0	12	30	5	0.6	SXR821M035ST	
1000	0.16	1540	350.0	12	30	5	0.6	SXR102M035ST	WGR102M1VJ41V
1200	0.13	1770	420.0	12	35	5	0.6	SXR122M035ST	
1500	0.12	1980	525.0	12	40	5	0.6	SXR152M035ST	
2200	0.08	2030	770.0	16	36	7.5	0.8	SXR222M035ST	WGR222M1VK42V
3300	0.47	2460	1155.0	18	40	7.5	0.8	SXR332M035ST	
<b>50 WVDC; 63 VDC Surge</b>									
68	1.95	400	34.0	10	12	5	0.6	SXR680M050ST	WGR680M1HF16V
100	1.33	635	50.0	10	16	5	0.6	SXR101M050ST	WGR101M1HG18V
120	1.11	650	60.0	10	16	5	0.6	SXR121M050ST	
150	0.88	860	75.0	10	20	5	0.6	SXR151M050ST	
220	0.60	1030	110.0	10	25	5	0.6	SXR221M050ST	WGR221M1HG26V
330	0.40	1150	165.0	10	30	5	0.6	SXR331M050ST	WGR331M1HJ26V
470	0.28	1320	235.0	12	25	5	0.6	SXR471M050ST	WGR471M1HJ31V
680	0.20	1770	340.0	12	35	5	0.6	SXR681M050ST	WGR681M1HJ41V
820	0.16	1980	410.0	12	40	5	0.6	SXR821M050ST	
1000	0.13	1810	500.0	16	32	7.5	0.8	SXR102M050ST	WGR102M1HK42V
1200	0.11	2030	600.0	16	36	7.5	0.8	SXR122M050ST	
1500	0.10	2320	750.0	16	40	7.5	0.8	SXR152M050ST	
<b>63 WVDC; 79 VDC Surge</b>									
47	2.26	305	29.6	10	12	5	0.6	SXR470M063ST	WGR470M1JF16V
68	1.56	500	42.8	10	16	5	0.6	SXR680M063ST	WGR680M1JG18V
100	1.06	550	63.0	10	16	5	0.6	SXR101M063ST	WGR101M1JG26V
120	0.88	620	75.6	10	20	5	0.6	SXR121M063ST	
150	0.71	795	94.5	10	25	5	0.6	SXR151M063ST	
220	0.48	890	138.6	12	25	5	0.6	SXR221M063ST	WGR221M1JJ26V
330	0.32	1320	207.9	12	30	5	0.6	SXR331M063ST	WGR331M1JJ31V
470	0.23	1450	296.1	12	35	5	0.6	SXR471M063ST	WGR471M1JJ41V
680	0.16	1790	428.4	16	32	7.5	0.8	SXR681M063ST	WGR681M1JK42V
1000	0.11	2200	630.0	18	36	7.5	0.8	SXR102M063ST	
1200	0.09	2370	756.0	18	40	7.5	0.8	SXR122M063ST	
<b>100 WVDC; 125 VDC Surge</b>									
22	4.22	305	22.0	10	12	5	0.6	SXR220M100ST	
33	2.81	500	33.0	10	16	5	0.6	SXR330M100ST	
47	1.98	600	47.0	10	20	5	0.6	SXR470M100ST	WGR470M2AG26V
68	1.37	795	68.0	10	25	5	0.6	SXR680M100ST	WGR680M2AJ26V
100	0.93	955	100.0	10	30	5	0.6	SXR101M100ST	WGR101M2AJ31V
120	0.77	1040	120.0	12	30	5	0.6	SXR121M100ST	
150	0.62	1200	150.0	12	30	5	0.6	SXR151M100ST	
220	0.42	1440	220.0	16	32	7.5	0.8	SXR221M100ST	WGR221M2AK35V
330	0.28	1790	330.0	18	36	7.5	0.8	SXR331M100ST	WGR331M2AL42V