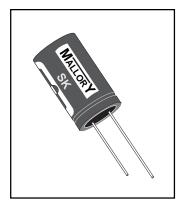
Type SK Radial Leaded Capacitors





- 85°C General Purpose
- Radial Leads Miniature Size
- High CV per Case Size
- 2000 Hour Load Life
- Suitable for Consumer Electronic Products, Such as Stereo Radio, TV. etc.
- Low ESR and Leakage Current

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

Dissipation Factor @ 120Hz, 25°C										
WV (V) 6.3 10 16 25 35 50 63 100 100-250 350-400										
DF(%) 22 19 16 14 12 10 9 8 15 20										

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

GENERAL SPECIFICATIONS

Operating Temperature: -40°C to +85°C

Voltage Range:

6.3 WVDC to 450 WVDC

Capacitance Range:

 $0.47\mu\text{F}$ to $15,000\mu\text{F}$

Capacitance Tolerance:

±20%

DC Leakage Current:

6.3 - 100VDC

 $I = \le .01 {\rm CV}$ or $3\mu{\rm A}$ whichever is greater after 2 minutes application of DC working voltage at $25^{\circ}{\rm C}$

Over 100VDC

 $I = \le .03CV + 10\mu A$ Max after 2 minutes application of DC working voltage at 25°C

 $C = Capacitance in \mu F$

V = Rated Voltage

I = Leakage Current in μ A

QA Stability Test:

Apply WVDC for 2,000 hrs at 85°C

- Capacitance change ≤20% from initial limits
- DC leakage current meets initial limits
- ESR ≤150% of initial measured value

Shelf Life:

500 hours; no voltage applied

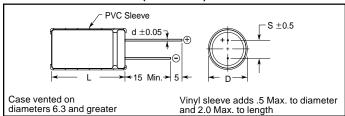
- Capacitor change within 20% of initial values
- Dissipation factor not exceed 150% of initial requirements
- Leakage current: not exceed 200% of initial requirement

The maximum ripple current at 85°C and 120 Hz for SK capacitors is shown in the Standard Rating Table. Maximum ripple current may be adjusted by the multipliers in the following tables.

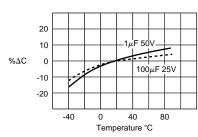
Rated	Ripple Multipliers						
WVDC	60Hz	120Hz	1kHz				
6 to 25	.85	1.0	1.10				
35 to 100	.80	1.0	1.15				
160 to 250	.75	1.0	1.25				
350 to 450	.70	1.0	1.30				

Ambient Temperature	Ripple Multiplier
+85°C	1.00
+75°C	1.14
+65°C	1.25

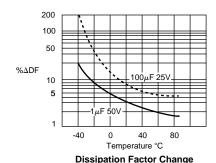
Outline Dimensions (Millimeters)



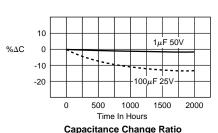
Temperature Characteristics

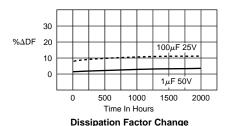


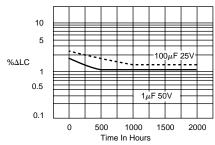
Capacitance Change Ratio



Load Life Characteristics







Leakage Current Change

Type SK Radial Leaded Capacitors



	Max ESR Ohms	Max Ripple mA	Max LC μA		Size (M	lillimeters)		New	Previous	
Cap μF	120Hz 25°C	120Hz 85°C	2 Minutes	D Diameter	L Length	S Lead Space	d	Catalog Number	Catalog Number	
6.3 WVDC; 8 VDC Surge										
100	2.92	130	6.3	5	11	2	0.5	SK101M6R3ST	SKR101M0JD11	
220	1.33	240	13.9	6.3	11	2.5	0.5	SK221M6R3ST	SKR221M0JE11V	
330	0.88	300	20.8	6.3	11	2.5	0.5	SK331M6R3ST	SKR331M0JE11V	
470	0.62	380	29.6	8	11.5	3.5	0.6	SK471M6R3ST	SKR471M0JF11V	
1,000	0.29	580	63.0	10	13	5	0.6	SK102M6R3ST	SKR102M0JG13V	
2,200	0.14	1050	138.6	10	21	5	0.6	SK222M6R3ST	SKR222M0JG21V	
3,300	0.10	1250	207.9	13	21	5	0.6	SK332M6R3ST	SKR332M0JJ21V	
4,700	0.08	1700	296.1	13	26	5	0.6	SK472M6R3ST	SKR472M0JJ26V	
6,800	0.07	1900	428.4	16	25	7.5	0.8	SK682M6R3ST	SKR682M0JK25V	
10,000	0.05	2250	630.0	16	32	7.5	0.8	SK103M6R3ST	SKR103M0JK32V	
15,000	0.04	2680	945.0	18	35	7.5	0.8	SK153M6R3ST	SKR153M0JL35V	
				10 WVD	C; 13 V	/DC Surge				
33	7.64	80	3.3	5	11	2	0.5	SK330M010ST	SKR330M1AD11	
47	5.36	95	4.7	5	11	2	0.5	SK470M010ST	SKR470M1AD11	
100	2.52	180	10.0	5	11	2	0.5	SK101M010ST	SKR101M1AD11	
220	1.15	250	22.0	6.3	11	2.5	0.5	SK221M010ST	SKR221M1AE11V	
330	0.76	330	33.0	8	11	3.5	0.6	SK331M010ST	SKR331M1AF11V	
470	0.54	400	47.0	8	11	3.5	0.6	SK471M010ST	SKR471M1AF11V	
1,000	0.25	630	100.0	10	16	5	0.6	SK102M010ST	SKR102M1AG16V	
2,200	0.14	1100	220.0	10	21	5	0.6	SK222M010ST	SKR222M1AJ21V	
3,300	0.10	1400	330.0	13	21	5	0.6	SK332M010ST	SKR332M1AJ21V	
4,700	0.08	1800	470.0	16	25	7.5	0.8	SK472M010ST	SKR472M1AK25V	
6,800	0.07	2150	680.0	16	32	7.5	0.8	SK682M010ST	SKR682M1AK32V	
10,000	0.05	2500	1000.0	18	35	7.5	0.8	SK103M010ST	SKR103M1AL35V	
15,000	0.04	2950	1500.0	18	42	7.5	0.8	SK153M010ST	SKR153M1AL42V	
				16 WVD	C; 20 V	/DC Surge				
22	9.65	75	3.5	5	11	2	0.5	SK220M016ST	SKR220M1CD11	
33	6.43	110	5.3	5	11	2	0.5	SK330M016ST	SKR330M1CD11	
47	4.52	130	7.5	5	11	2	0.5	SK470M016ST	SKR470M1CD11	
100	2.12	185	16.0	6.3	11	2.5	0.5	SK101M016ST	SKR101M1CE11V	
220	0.97	320	35.2	8	11.5	3.5	0.6	SK221M016ST	SKR221M1CF11V	
330	0.64	360	52.8	8	11.5	3.5	0.6	SK331M016ST	SKR331M1CF11V	
470	0.45	470	75.2	10	13	5	0.6	SK471M016ST	SKR471M1CG13V	
1,000	0.21	790	160.0	10	21	5	0.6	SK102M016ST	SKR102M1CG21V	
2,200	0.14	1350	352.0	13	21	5	0.6	SK222M016ST	SKR222M1CJ21V	
3,300	0.10	1700	528.0	13	26	5	0.6	SK332M016ST	SKR332M1CJ26V	
4,700	0.08	2100	752.0	16	32	7.5	0.8	SK472M016ST	SKR472M1CK32V	
6,800	0.07	2500	1088.0	18	35	7.5	0.8	SK682M016ST	SKR682M1CL35V	
10,000	0.05	2700	1600.0	18	42	7.5	0.8	SK103M016ST	SKR103M1CL42V	
				25 WVD	C; 32 V	/DC Surge				
10	18.57	50	3.0	5	11	2	0.5	SK100M025ST	SKR100M1ED11	
22	8.44	90	5.5	5	11	2	0.5	SK220M025ST	SKR220M1ED11	
33	5.63	110	8.3	5	11	2	0.5	SK330M025ST	SKR330M1ED11	
47	3.95	130	11.8	5	11	2	0.5	SK470M025ST	SKR470M1ED11	
100	1.85	185	25.0	6.3	11	2.5	0.5	SK101M025ST	SKR101M1EE11V	



	Max ESR Ohms	Max Ripple mA	Max LC μA		Size (M	illimeters)		New	Previous Catalog Number
Cap μF	120Hz 25°C	120Hz 85°C	2 Minutes	D Diameter	L Length	S Lead Space	d	Catalog Number	
				25 WVD	C; 32 \	/DC Surge			
220	0.84	320	55.0	8	11.5	3.5	0.6	SK221M025ST	SKR221M1EF11V
330	0.56	420	82.5	10	13	5	0.6	SK331M025ST	SKR331M1EG13V
470	0.39	540	117.5	10	16	5	0.6	SK471M025ST	SKR471M1EG16V
1,000	0.18	950	250.0	13	21	5	0.6	SK102M025ST	SKR102M1EJ21V
2,200	0.14	1550	550.0	13	26	5	0.6	SK222M025ST	SKR222M1EJ26V
3,300	0.10	1950	825.0	16	32	7.5	0.8	SK332M025ST	SKR332M1EK32V
4,700	0.08	2360	1175.0	18	35	7.5	0.8	SK472M025ST	SKR472M1EL35V
6,800	0.06	2550	1700.0	18	42	7.5	0.8	SK682M025ST	SKR682M1EL42V
	·			35 WVD	C; 44 V	DC Surge		·	·
10	15.92	60	3.5	5	11	2	0.5	SK100M035ST	SKR100M1VD11
22	7.23	95	7.7	5	11	2	0.5	SK220M035ST	SKR220M1VD11
33	4.82	115	11.6	5	11	2	0.5	SK330M035ST	SKR330M1VD11
47	3.38	140	16.5	6.3	11	2.5	0.5	SK470M035ST	SKR470M1VE11V
100	1.59	230	35.0	8	11.5	3.5	0.6	SK101M035ST	SKR101M1VF11V
220	0.72	370	77.0	10	13	5	0.6	SK221M035ST	SKR221M1VG13V
330	0.48	490	115.5	10	16	5	0.6	SK331M035ST	SKR331M1VG16V
470	0.33	640	164.5	10	21	5	0.6	SK471M035ST	SKR471M1VG21V
1,000	0.15	1100	350.0	13	21	5	0.6	SK102M035ST	SKR102M1VJ21V
2,200	0.14	1800	770.0	16	32	7.5	0.8	SK222M035ST	SKR222M1VK32V
3,300	0.10	2220	1155.0	18	35	7.5	0.8	SK332M035ST	SKR332M1VL35V
4,700	0.08	2400	1645.0	18	42	7.5	0.8	SK472M035ST	SKR472M1VL42V
				50 WVD	C; 63 V	/DC Surge			
0.47	282.33	5	3.0	5	11	2	0.5	SKR47M050ST	SKRR47M1HD11
1	132.70	10	3.0	5	11	2	0.5	SK010M050ST	SKR010M1HD11
2.2	60.32	23	3.0	5	11	2	0.5	SK2R2M050ST	SKR2R2M1HD11
3.3	40.21	35	3.0	5	11	2	0.5	SK3R3M050ST	SKR3R3M1HD11
4.7	28.23	40	3.0	5	11	2	0.5	SK4R7M050ST	SKR4R7M1HD11
10	13.27	65	5.0	5	11	2	0.5	SK100M050ST	SKR100M1HD11
22	6.03	100	11.0	5	11	2	0.5	SK220M050ST	SKR220M1HD11
33	4.02	125	16.5	6.3	11	2.5	0.5	SK330M050ST	SKR330M1HE11V
47	2.82	150	23.5	6.3	11	2.5	0.5	SK470M050ST	SKR470M1HE11V
100	1.33	250	50.0	8	11	3.5	0.6	SK101M050ST	SKR101M1HF11V
220	0.60	440	110.0	10	16	5	0.6	SK221M050ST	SKR221M1HG16V
330	0.40	580	165.0	10	16	5	0.6	SK331M050ST	SKR331M1HG21V
470	0.28	760	235.0	13	21	5	0.6	SK471M050ST	SKR471M1HJ21V
1,000	0.13	1350	500.0	16	25	5	0.8	SK102M050ST	SKR102M1HK25V
2,200	0.14	2090	1100.0	18	35	7.5	0.8	SK222M050ST	SKR222M1HL35V
3,300	0.10	2320	1650.0	18	42	7.5	0.8	SK332M050ST	SKR332M1HL42V
				63 WVD	C; 79 \	/DC Surge			
0.47	254.10	5	3.0	5	11	2	0.5	SKR47M063ST	SKRR47M1JD11
1	119.43	10	3.0	5	11	2	0.5	SK010M063ST	SKR010M1JD11
2.2	54.28	29	3.0	5	11	2	0.5	SK2R2M063ST	SKR2R2M1JD11
3.3	36.19	40	3.0	5	11	2	0.5	SK3R3M063ST	SKR3R3M1JD11
4.7	25.41	45	3.0	5	11	2	0.5	SK4R7M063ST	SKR4R7M1JD11
	11.94	70	6.3	5	11	2	0.5	SK100M063ST	SKR100M1JD11



	Max ESR Ohms	Max Ripple mA	Max LC μA		Size (M	illimeters)		New	Previous	
Cap μF	120Hz 25°C	120Hz 85°C	2 Minutes	D Diameter	L Length	S Lead Space	d	Catalog Number	Catalog Number	
63 WVDC; 79VDC Surge										
22	5.43	115	13.9	6.3	11	2.5	0.5	SK220M063ST	SKR220M1JE11V	
33	3.62	140	20.8	6.3	11	2.5	0.5	SK330M063ST	SKR330M1JE11V	
47	2.54	190	29.6	8	11	3.5	0.6	SK470M063ST	SKR470M1JF11V	
100	1.19	300	63.0	10	13	5	0.6	SK101M063ST	SKR101M1JG13V	
220	0.54	490	138.6	10	21	5	0.6	SK221M063ST	SKR221M1JG21V	
330	0.36	680	207.9	13	21	5	0.6	SK331M063ST	SKR331M1JJ21V	
470	0.25	880	296.1	13	26	5	0.6	SK471M063ST	SKR471M1JJ26V	
1,000	0.12	1550	630.0	16	32	7.5	0.8	SK102M063ST	SKR102M1JK32V	
				100 WVD	C; 125	VDC Surge)			
0.47	225.87	10	3.0	5	11	2	0.5	SKR47M100ST	SKRR47M2AD11	
1	106.16	21	3.0	5	11	2	0.5	SK010M100ST	SKR010M2AD11	
2.2	48.25	30	3.0	5	11	2	0.5	SK2R2M100ST	SKR2R2M2AD11	
3.3	32.17	40	3.3	5	11	2	0.5	SK3R3M100ST	SKR3R3M2AD11	
4.7	22.59	50	4.7	5	11	2	0.5	SK4R7M100ST	SKR4R7M2AD11	
10	10.62	75	10.0	6.3	11	2.5	0.5	SK100M100ST	SKR100M2AE11V	
22	4.83	130	22.0	8	11	3.5	0.6	SK220M100ST	SKR220M2AF11V	
33	3.22	170	33.0	10	13	5	0.6	SK330M100ST	SKR330M2AG13V	
47	2.26	230	47.0	10	16	5	0.6	SK470M100ST	SKR470M2AG16V	
100	1.06	400	100.0	13	21	5	0.6	SK101M100ST	SKR101M2AJ21V	
220	0.48	710	220.0	16	25	7.5	0.8	SK221M100ST	SKR221M2AK25V	
330	0.32	860	330.0	16	25	7.5	0.8	SK331M100ST	SKR331M2AK25V	
470	0.23	1100	470.0	16	32	7.5	0.8	SK471M100ST	SKR471M2AK32V	
		-		160 W//F	C 200	VDC Surge			-	
0.47	400.50	40	40.0					SKR47M160ST	OVDD 478400544V	
0.47	423.50	12	12.3	6.3	11	2.5	0.5		SKRR47M2CE11V	
1	199.04	17	14.8	6.3	11	2.5	0.5	SK010M160ST	SKR010M2CE11V	
2.2	90.47	26	20.6	6.3	11	2.5	0.5	SK2R2M160ST	SKR2R2M2CE11V	
3.3	60.32	35	25.8	6.3	11	2.5	0.5	SK3R3M160ST	SKR3R3M2CE11V	
4.7	42.35	40 65	32.6	6.3	11	2.5 3.5	0.5	SK4R7M160ST	SKR4R7M2CE11V	
10	19.90		58.0	8	11		0.5	SK100M160ST	SKR100M2CF11V	
22	9.05	110	115.6	10	16	5	0.6	SK220M160ST	SKR220M2CG16V	
33 47	6.03 4.23	150 180	168.4 235.6	10	21 21	5 5	0.6 0.6	SK330M160ST SK470M160ST	SKR330M2CG21V SKR470M2CJ21V	
									SKR470M2CJ21V SKR101M2CJ26V	
100	1.99 0.90	300 510	490.0 1066.0	13	26	5	0.6	SK101M160ST SK221M160ST	SKR101M2CJ26V SKR221M2CK35V	
220 330	0.90	600	1594.0	16 18	36 42	7.5 7.5	0.8 0.8	SK331M160ST	SKR331M2CL42V	
				200 W///	C. 250	VDC Surge				
0.47	423.50	12	10.0			VDC Surge	0.5	SKR47M200ST	SKRR47M2DE11V	
0.47			12.8	6.3	11	2.5 2.5	0.5		SKR47M2DE11V SKR010M2DE11V	
1	199.04 90.47	17	16.0 23.2	6.3 6.3	11 11		0.5	SK010M200ST SK2R2M200ST	SKR010M2DE11V SKR2R2M2DE11V	
2.2 3.3	60.32	26 35	29.8	6.3	11	2.5 2.5	0.5	SK3R3M200ST	SKR2R2M2DE11V SKR3R3M2DE11V	
4.7	42.35	45	38.2	8	11	3.5	0.5	SK4R7M200ST	SKR4R7M2DF11V	
10	19.90	70	70.0	10	13		0.6	SK4R7M200ST SK100M200ST	SKR4R7M2DF11V SKR100M2DG13V	
						5				
22	9.05	110	142.0	10	21	5	0.6	SK220M200ST	SKR220M2DG21V	
33 47	6.03 4.23	160 180	208.0 292.0	13 13	21 21	5	0.6 0.6	SK330M200ST SK470M200ST	SKR330M2DJ21V SKR470M2DJ21V	
47	4.23	100	292.0	13	۷1	5	0.0	31.47 UIVIZUUS I	ONIN#1 UIVIZUUZ I V	



	Max ESR Ohms	Max Ripple mA	Max LC μA		Size (M	lillimeters)	New	Previous			
Cap μF	120Hz 25°C	120Hz 85°C	2 Minutes	D Diameter	L Length	S Lead Space	d	Catalog Number	Catalog Number		
200 WVDC; 250VDC Surge											
100	1.99	330	610.0	16	25	7.5	0.8	SK101M200ST	SKR101M2DK25V		
220	0.90	520	1330.0	18	42	7.5	0.8	SK221M200ST	SKR221M2DL42V		
	250 WVDC: 300 VDC Surge										
0.47	400.50	10	10.5	1	, T			OLVE 47MOSOOT	01/00/17/10/55/1//		
0.47	423.50	12 17	13.5 17.5	6.3 6.3	11	2.5 2.5	0.5 0.5	SKR47M250ST	SKRR47M2EE11V		
2.2	199.04 90.47		26.5	6.3	11 11	2.5	0.5	SK010M250ST SK2R2M250ST	SKR010M2EE11V SKR2R2M2EE11V		
		30					0.5	SK2R2M250S1 SK3R3M250ST	SKR2R2M2EE11V SKR3R3M2EF11V		
3.3 4.7	60.32 42.35	35	34.8 45.3	8	11	3.5	0.6	SK3R3M250ST SK4R7M250ST	SKR3R3M2EF11V SKR4R7M2EF11V		
10	19.90	45 70		10	11 16	3.5 5	0.6	SK4R7M250S1 SK100M250ST	SKR4R7M2EF11V SKR100M2EG16V		
22	9.05	130	85.0 175.0	13	21	5	0.6	SK220M250ST	SKR220M2EJ21V		
33	6.03	160	257.5	13	21	5	0.6	SK330M250ST	SKR330M2EJ21V		
47	4.23	210	362.5	13	26	5	0.6	SK470M250ST	SKR330W2EJ2TV SKR470M2EJ26V		
	1.99		760.0	16	32	-	0.8	SK101M250ST	SKR470M2EJ26V SKR101M2EK32V		
100	1.99	310	760.0	16	32	7.5	0.8	3K101W25051	SKK IU IIVIZEK32V		
				350 WVD	C; 400	VDC Surge)				
0.47	564.67	14	14.9	8	11	3.5	0.6	SKR47M350ST	SKRR47M2VF11V		
1	265.39	18	20.5	8	11	3.5	0.6	SK010M350ST	SKR010M2VF11V		
2.2	120.63	28	33.1	8	11	3.5	0.6	SK2R2M350ST	SKR2R2M2VF11V		
3.3	80.42	35	44.7	10	13	5	0.6	SK3R3M350ST	SKR3R3M2VG13V		
4.7	56.47	40	59.4	10	13	5	0.6	SK4R7M350ST	SKR4R7M2VG13V		
10	26.54	70	115.0	10	21	5	0.6	SK100M350ST	SKR100M2VG21V		
22	12.06	110	241.0	13	21	5	0.6	SK220M350ST	SKR220M2VJ21V		
33	8.04	140	356.5	13	26	5	0.6	SK330M350ST	SKR330M2VJ26V		
47	5.65	220	503.5	16	25	7.5	0.8	SK470M350ST	SKR470M2VK25V		
100	2.65	360	1060.0	18	36	7.5	0.8	SK101M350ST	SKR101M2VL35V		
				400 WVE	OC; 450	VDC Surge	!				
0.47	564.67	14	15.6	8	11	3.5	0.6	SKR47M400ST	SKRR47M2GF11V		
1	265.39	18	22.0	8	11	3.5	0.6	SK010M400ST	SKR010M2GF11V		
2.2	120.63	28	36.4	8	11	3.5	0.6	SK2R2M400ST	SKR2R2M2GF11V		
3.3	80.42	32	49.6	10	13	5	0.6	SK3R3M400ST	SKR3R3M2GG13V		
4.7	56.47	41	66.4	10	16	5	0.6	SK4R7M400ST	SKR4R7M2GG16V		
10	26.54	70	130.0	13	21	5	0.6	SK100M400ST	SKR100M2GJ21V		
22	12.06	120	274.0	13	26	5	0.6	SK220M400ST	SKR220M2GJ26V		
33	8.04	140	406.0	16	25	7.5	0.8	SK330M400ST	SKR330M2GK25V		
47	5.65	160	574.0	16	32	7.5	0.8	SK470M400ST	SKR470M2GK32V		
	0.00	100	07 1.0	10		7.0	0.0	- Citirolii 10001	OTAL TO OTAL COTOC V		
				450 WVE	C; 500	VDC Surge					
0.47	564.67	14	16.3	8	11	3.5	0.6	SKR47M450ST	SKRR47M2WF11V		
1	265.39	19	23.5	8	11.5	3.5	0.6	SK010M450ST	SKR010M2WF11V		
2.2	120.63	29	39.7	10	13	5	0.6	SK2R2M450ST	SKR2R2M2WG13V		
3.3	80.42	35	54.6	10	16	5	0.6	SK3R3M450ST	SKR3R3M2WG16V		
4.7	56.47	50	73.5	10	18	5	0.6	SK4R7M450ST	SKR4R7M2WG18V		
10	26.54	75	145.0	13	21	5	0.6	SK100M450ST	SKR100M2WJ21V		
22	12.06	110	307.0	16	25	7.5	0.8	SK220M450ST	SKR220M2WK25V		
33	8.04	150	455.5	16	36	7.5	0.8	SK330M450ST	SKR330M2WK32V		
47	5.65	230	644.5	18	40	7.5	0.8	SK470M450ST	SKR470M2WL35V		