



## Metallized Polyester Film Capacitors

Radial Leaded, Epoxy Dipped

### FEATURES

Small Size - Self Healing - Low Cost

### APPLICATIONS

General Purpose - Bypass - Coupling - Blocking

Operating Temperature Range	<b>-55°C to +125°C</b>					
Capacitance Tolerance	$\pm 10\%$ at 1 kHz, 25°C $\pm 5\%$ optional					
Peak, AC voltage (50/60 Hz)	WVDC	100	250	400	630	1000
	VAC	63	160	200	220	250
For T>+85°C, The voltage must be decreased by 1.25% per °C						
Dissipation Factor (MAX) 25°C	Frequency (kHz)		Dissipation Factor			
	1		1.0%			
	10		1.5%			
Insulation Resistance @25°C (<70% RH) for 1 minute at 100VDC applied	WVDC	Capacitance	Insulation Resistance			
	≤100	≤0.33μF	15000 MΩ			
	>100	>0.33μF	30000 MΩ			
	≤100	<0.33μF	5000 MΩxμF			
	>100	>0.33μF	10000 MΩxμF			
Load Life	2000 Hours, +85C with 125% of rated voltage					
	Capacitance Change		≤5% of initially measured value			
	Dissipation Factor		≤0.005 at 1kHz and 25°C			
	Insulation Resistance		≥50% of maximum specified value			
Damp Heat test	1000 Hours, 93%RH(+/-2%), +40°C and no voltage applied					
	Capacitance Change		≤5% of initially measured value			
	Dissipation Factor		≤0.005 at 1kHz and 25°C			
	Insulation Resistance		≥50% of maximum specified value			
Self Inductance	<1 nano-Henry per mm of body length and lead length					
Capacitance Drift Factor	<1.0% after 2 years at 40°C <75%RH					
Capacitance Temperature Coefficient	+400 ppm/°C, ±200ppm/°C					
Dielectric Strength	<b>Terminal to Terminal</b>					
	160% of VDC applied for 5 Seconds and 25°C					
Dielectric Construction	Polyester Metallized film					
Coating	Flame Retardant epoxy resin (UL94V0)					
Leads	Lead free tinned					



L MAX	10.5	12	18.5	26	31
S+1.0	7.5	10	15	22.5	27.5
G MAX	1.5	1.5	1.5	1.5	1.5
d +0.05	0.6	0.6	0.8	0.8	0.8

# MSR

Metallized Polyester Epoxy  
Dipped Radial Lead

WVDC	Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
100	0.047	473MSR100K	35	10.5x9.5x6	7.5	0.6
100	0.068	683MSR100K	35	10.5x9.5x6	7.5	0.6
100	0.1	104MSR100K	30	12.5x8.5x5.5	10	0.6
100	0.15	154MSR100K	30	13x9x5.5	10	0.6
100	0.22	224MSR100K	30	13x10x6.5	10	0.6
100	0.33	334MSR100K	20	17.5x10x5.5	15	0.8
100	0.47	474MSR100K	20	18x11x7	15	0.8
100	0.68	684MSR100K	20	18.5x12.5x7.5	15	0.8
100	1	105MSR100K	20	18.5x13.5x8.5	15	0.8
100	1.5	155MSR100K	10	22.5x14.5x8	20	0.8
100	2.2	225MSR100K	10	22.5x16.5x10	20	0.8
100	3.3	335MSR100K	10	22.5x20x12	20	0.8
100	4.7	475MSR100K	5	30x20.5x11	27.5	0.8
100	6.8	685MSR100K	5	32x23.5x14.5	27.5	0.8
100	10	106MSR100K	5	32x28.5x17.5	27.5	0.8
250	0.015	153MSR250K	110	10.5x9.5x5.5	7.5	0.6
250	0.022	223MSR250K	110	10.5x9.5x5.5	7.5	0.6
250	0.033	333MSR250K	110	10.5x9.5x6	7.5	0.6
250	0.047	473MSR250K	110	12.5x9x5	10	0.6
250	0.068	683MSR250K	110	12.5x10x5	10	0.6
250	0.1	104MSR250K	110	13x10x6.5	10	0.6
250	0.15	154MSR250K	110	13x13x7	10	0.6
250	0.22	224MSR250K	45	18x11.5x6	15	0.8
250	0.33	334MSR250K	45	18.5x12x7	15	0.8
250	0.47	474MSR250K	20	22.5x12.5x7.5	20	0.8
250	0.68	684MSR250K	20	22.5x13.5x8.5	20	0.8
250	1	105MSR250K	20	22.5x15x10	20	0.8
250	1.5	155MSR250K	15	30x17.5x9.5	27.5	0.8
250	2.2	225MSR250K	15	30.5x22x12	27.5	0.8
400	0.01	103MSR400K	160	10.5x9x5.5	7.5	0.6
400	0.015	153MSR400K	160	10.5x9.5x5.5	7.5	0.6
400	0.022	223MSR400K	160	13x9.5x6	10	0.6

WVDC	Capacitance (μF)	IC PART NUMBER	dv/dt (v/μ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
400	0.033	333MSR400K	160	13x10.5x6.5	10	0.6
400	0.047	473MSR400K	160	13x11x7	10	0.6
400	0.068	683MSR400K	65	17.5x10x5.5	15	0.8
400	0.1	104MSR400K	65	18.5x12x7	15	0.8
400	0.15	154MSR400K	65	18.5x13.5x8	15	0.8
400	0.22	224MSR400K	30	22.5x14.5x8	20	0.8
400	0.33	334MSR400K	30	22.5x15x9	20	0.8
400	0.47	474MSR400K	30	23.5x19x10.5	20	0.8
400	0.68	684MSR400K	25	32x19x12	27.5	0.8
400	1	105MSR400K	25	30.5x21x12.5	27.5	0.8
630	0.01	103MSR630K	200	13x10x6	10	0.6
630	0.015	153MSR630K	200	13x10.5x6.5	10	0.6
630	0.022	223MSR630K	200	13x12.5x7.5	10	0.6
630	0.033	333MSR630K	90	18.5x12x6.5	15	0.8
630	0.047	473MSR630K	90	18x12.5x7.5	15	0.6
630	0.068	683MSR630K	90	18.5x14x8.5	15	0.8
630	0.1	104MSR630K	90	18.5x15.5x10	15	0.8
630	0.15	154MSR630K	35	22.5x16.5x9.5	20	0.8
630	0.22	224MSR630K	35	22.5x19x11.5	20	0.8
630	0.33	334MSR630K	30	32x19x12	27.5	0.8
630	0.47	474MSR630K	30	32x22x13.5	27.5	0.8
630	0.68	684MSR630K	30	33x24.5x14	27.5	0.8
1000	0.01	103MSR102K	80	14x11.5x7	10	0.6
1000	0.015	153MSR102K	80	14x11.5x8	10	0.6
1000	0.022	223MSR102K	40	19x12.5x8.5	15	0.8
1000	0.033	333MSR102K	40	19.5x14x9.5	15	0.8
1000	0.047	473MSR102K	33	27x14x9	22.5	0.8
1000	0.068	683MSR102K	33	27x15x10	22.5	0.8
1000	0.1	104MSR102K	33	27x16.5x11.5	22.5	0.8
1000	0.22	224MSR102K	20	32.5x22.5x14.5	27.5	0.8
1000	0.33	334MSR102K	20	32.5x25.5x16	27.5	0.8
1000	0.47	474MSR102K	20	32.5x26.5x18.5	27.5	0.8