



Metallized Polyester Film Capacitors

Radial Leaded, Epoxy Dipped

FEATURES

Small Size - Self Healing - Low Cost

APPLICATIONS

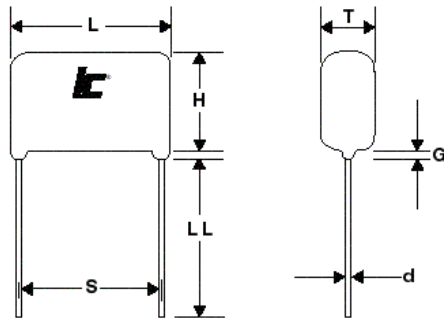
General Purpose - Bypass - Coupling - Blocking

Operating Temperature Range	-55°C to +125°C					
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	$\leq 0.33\mu\text{F}$		15000 MΩ		
	> 100	$> 0.33\mu\text{F}$		30000 MΩxμF		
	≤ 100	$\leq 0.33\mu\text{F}$		5000 MΩxμF		
	> 100	$> 0.33\mu\text{F}$		10000 MΩxμF		
Load Life	2000 Hours, +85C with 125% of rated voltage					
	Capacitance Change		$\leq 5\%$ of initially measured value			
	Dissipation Factor		≤ 0.005 at 1kHz and 25°C			
	Insulation Resistance		$\geq 50\%$ of maximum specified value			
Damp Heat test	1000 Hours, 93%RH(+/-2%), +40°C and no voltage applied					
	Capacitance Change		$\leq 5\%$ of initially measured value			
	Dissipation Factor		≤ 0.005 at 1kHz and 25°C			
	Insulation Resistance		$\geq 50\%$ 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					
Capacitance Temperature Coefficient	$+400$ ppm/°C, ± 200 ppm/°C					
Dielectric Strength	Terminal to Terminal					
	160% of VDC applied for 2 Seconds and 25°C					
Dielectric	Polyester					
Construction	Metallized film					
Coating	Flame Retardant epoxy resin (UL94V0)					
Leads	Lead free tinned copper leads					

MSR

Metallized Polyester Film Capacitors

Radial Leaded, Epoxy Dipped



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

ic ILLINOIS CAPACITOR

Your Global Source for World-Class Capacitors

© 2017 Illinois Capacitor

North America
Tel: 847.675.1760
sales@illcap.com

Asia
Tel: 852.2793 0931
sales@illcap.com.hk

MSR

Metallized Polyester Epoxy
Dipped Radial lead

Capacitance (μF)	WVDC	IC PART NUMBER	dv/dt (v/μ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
0.01	400	103MSR400K	160	10.5x9x5.5	7.5	0.6
0.01	630	103MSR630K	200	13x10x6	10	0.6
0.01	1000	103MSR102K	80	14x11.5x7	10	0.6
0.015	250	153MSR250K	110	10.5x9.5x5.5	7.5	0.6
0.015	400	153MSR400K	160	10.5x9.5x5.5	7.5	0.6
0.015	630	153MSR630K	200	13x10.5x6.5	10	0.6
0.015	1000	153MSR102K	80	14x11.5x8	10	0.6
0.022	250	223MSR250K	110	10.5x9.5x5.5	7.5	0.6
0.022	400	223MSR400K	160	13x9.5x6	10	0.6
0.022	630	223MSR630K	200	13x12.5x7.5	10	0.6
0.022	1000	223MSR102K	40	19x12.5x8.5	15	0.8
0.033	250	333MSR250K	110	10.5x9.5x6	7.5	0.6
0.033	400	333MSR400K	160	13x10.5x6.5	10	0.6
0.033	630	333MSR630K	90	18.5x12x6.5	15	0.8
0.033	1000	333MSR102K	40	19.5x14x9.5	15	0.8
0.047	100	473MSR100K	35	10.5x9.5x6	7.5	0.6
0.047	250	473MSR250K	110	12.5x9x5	10	0.6
0.047	400	473MSR400K	160	13x11x7	10	0.6
0.047	630	473MSR630K	90	18x12.5x7.5	15	0.6
0.047	1000	473MSR102K	33	27x14x9	22.5	0.8
0.068	100	683MSR100K	35	10.5x9.5x6	7.5	0.6
0.068	250	683MSR250K	110	12.5x10x5	10	0.6
0.068	400	683MSR400K	65	17.5x10x5.5	15	0.8
0.068	630	683MSR630K	90	18.5x14x8.5	15	0.8
0.068	1000	683MSR102K	33	27x15x10	22.5	0.8
0.1	100	104MSR100K	30	12.5x8.5x5.5	10	0.6
0.1	250	104MSR250K	110	13x10x6.5	10	0.6
0.1	400	104MSR400K	65	18.5x12x7	15	0.8
0.1	630	104MSR630K	90	18.5x15.5x10	15	0.8
0.1	1000	104MSR102K	33	27x16.5x11.5	22.5	0.8
0.15	100	154MSR100K	30	13x9x5.5	10	0.6
0.15	250	154MSR250K	110	13x13x7	10	0.6

Capacitance (μF)	WVDC	IC PART NUMBER	dv/dt (v/μ sec.)	Dims LxHxT (mm)	S (MM)	d (MM)
0.15	400	154MSR400K	65	18.5x13.5x8	15	0.8
0.15	630	154MSR630K	35	22.5x16.5x9.5	20	0.8
0.22	100	224MSR100K	30	13x10x6.5	10	0.6
0.22	250	224MSR250K	45	18x11.5x6	15	0.8
0.22	400	224MSR400K	30	22.5x14.5x8	20	0.8
0.22	630	224MSR630K	35	22.5x19x11.5	20	0.8
0.22	1000	224MSR102K	20	32.5x22.5x14.5	27.5	0.8
0.33	100	334MSR100K	20	17.5x10x5.5	15	0.8
0.33	250	334MSR250K	45	18.5x12x7	15	0.8
0.33	400	334MSR400K	30	22.5x15x9	20	0.8
0.33	630	334MSR630K	30	32x19x12	27.5	0.8
0.33	1000	334MSR102K	20	32.5x25.5x16	27.5	0.8
0.47	100	474MSR100K	20	18x11x7	15	0.6
0.47	250	474MSR250K	20	22.5x12.5x7.5	20	0.8
0.47	400	474MSR400K	30	23.5x19x10.5	20	0.8
0.47	630	474MSR630K	30	32x22x13.5	27.5	0.8
0.47	1000	474MSR102K	20	32.5x26.5x18.5	27.5	0.8
0.68	100	684MSR100K	20	18.5x12.5x7.5	15	0.6
0.68	250	684MSR250K	20	22.5x13.5x8.5	20	0.8
0.68	400	684MSR400K	25	32x19x12	27.5	0.8
0.68	630	684MSR630K	30	33x24.5x14	27.5	0.8
1	100	105MSR100K	20	18.5x13.5x8.5	15	0.8
1	250	105MSR250K	20	22.5x15x10	20	0.8
1	400	105MSR400K	25	30.5x21x12.5	27.5	0.8
1.5	100	155MSR100K	10	22.5x14.5x8	20	0.8
1.5	250	155MSR250K	15	30x17.5x9.5	27.5	0.8
2.2	100	225MSR100K	10	22.5x16.5x10	20	0.8
2.2	250	225MSR250K	15	30.5x22x12	27.5	0.8
3.3	100	335MSR100K	10	22.5x20x12	20	0.8
4.7	100	475MSR100K	5	30x20.5x11	27.5	0.8
6.8	100	685MSR100K	5	32x23.5x14.5	27.5	0.8
10	100	106MSR100K	5	32x28.5x17.5	27.5	0.8