

# MPR

## +105°C Metallized Polypropylene Epoxy Dipped Radial Lead Capacitors



- Bypass
- Audio
- Filtering
- Timing
- Coupling
- Blocking

<b>Operating Temperature Range</b>		<b>-55°C to 105°C</b>			
<b>Capacitance Tolerance</b>		<b>±10% at 1kHz, 25°C</b>			
<b>Voltage Range</b>	<b>WVDC</b>	<b>250</b>	<b>400</b>	<b>630</b>	
	<b>VAC</b>	200	220	250	
<b>Dissipation Factor</b>		<b>.1% at 1 kHz, 25°C</b>			
<b>Insulation Resistance @20°C for 1 minute at 100 VDC</b>		<b>Capacitance</b>		<b>Insulation Resistance</b>	
		≤0.33 μF		100,000 MΩ	
		>0.33 μF		30,000 MΩ x μF	
<b>Load Life</b>		<b>2,000 hours, +85°C with 125% rated DC voltage</b>			
		<b>Capacitance Change</b>		≤3% maximum	
		<b>Dissipation Factor Change</b>		<125% maximum specification	
		<b>Insulation Resistance</b>		≥50% of minimum initial limits	
<b>Humidity Test</b>		<b>250 hours, 95% RH, 25°C and no applied voltage</b>			
		<b>Capacitance Change</b>		<5% of initial readings +25°C, 1kHz	
		<b>Dissipation Factor Change</b>		< 200% of initial +25°C, 1kHz	
		<b>Insulation Resistance</b>		≥ 3000MΩxμF (need not exceed 5000MΩ)	
<b>Self-inductance</b>		≤1 nH/mm along the capacitor pitch			
<b>Dielectric Strength</b>		150% of rated WVDC for 5 seconds at 25°C			
<b>Capacitance Drift Factor</b>		(after 2 years) ≤0.5% up to 40°C			
<b>Capacitance Temperature Coefficient</b>		-200 ppm/°C, ± 100ppm/°C			
<b>Type</b>		Extended metallized film			
<b>Dielectric</b>		Polypropylene film			
<b>Electrodes</b>		Vacuum deposited aluminum layers			
<b>Leads</b>		Tinned copper wire			
<b>Coating</b>		Flame retardant epoxy sealed resin (UL94V-O)			

## STANDARD PART LISTING

Capacitance (μF)	WVDC	IC <sup>®</sup> PART NUMBER	dv/dt (v/μs)	L x H x T	Capacitance (μF)	WVDC	IC <sup>®</sup> PART NUMBER	dv/dt (v/μs)	L x H x T	Capacitance (μF)	WVDC	IC <sup>®</sup> PART NUMBER	dv/dt (v/μs)	L x H x T
0.01	400	103MPR400K	350	13x9x5	0.047	400	473MPR400K	350	13x11x7.5	0.22	630	224MPR630K	180	31x17.5x10.5
0.01	630	103MPR630K	420	13x10x6	0.047	630	473MPR630K	400	18x13.5x8.5	0.33	250	334MPR250K	200	18x13x8.5
0.015	250	153MPR250K	220	13x9x5	0.068	250	683MPR250K	220	13x10.5x6	0.33	400	334MPR400K	165	26x15x10
0.015	400	153MPR400K	350	13x9.5x5	0.068	400	683MPR400K	300	18x11x6.5	0.33	630	334MPR630K	180	31x21.5x13
0.015	630	153MPR630K	420	13x11x7	0.068	630	683MPR630K	400	18x15.5x9.5	0.47	250	474MPR250K	110	26x14x8.5
0.022	250	223MPR250K	220	13x9x5	0.1	250	104MPR250K	220	13x11x7	0.47	400	474MPR400K	150	31x16.5x10.5
0.022	400	223MPR400K	350	13x10.5x5.5	0.1	400	104MPR400K	300	18x12.5x7.5	0.47	630	474MPR630K	180	31x24.5x15.5
0.022	630	223MPR630K	420	13x12.5x8.5	0.1	630	104MPR630K	230	26x15x10	0.68	250	684MPR250K	115	26x15x9.5
0.033	250	333MPR250K	220	13x9x5.5	0.15	250	154MPR250K	200	18x11x7	1	250	105MPR250K	110	26x16x12
0.033	400	333MPR400K	350	13x11x6.5	0.15	400	154MPR400K	185	26x13x7.5	1	400	105MPR400K	150	31x22x15
0.033	630	333MPR630K	400	18x11.5x7.5	0.15	630	154MPR630K	230	26x17x11	1.5	250	155MPR250K	100	31x18x13
0.047	250	473MPR250K	220	13x9.5x5.5	0.22	250	224MPR250K	200	18x12.5x7.5	2.2	250	225MPR250K	100	31x21x15
0.047	400	473MPR400K	350	13x11x7.5	0.22	400	224MPR400K	165	26x14x8.5					

NOTE: WVDC: MAXIMUM RATED DC WORKING VOLTAGE AT + 85°C.

## PHYSICAL DIMENSIONS

WVDC (VAC) μF	250 (200)	400 (220)	630 (250)
0.010	→	13x9x5	13x10x6
0.015	13x9x5	13x9.5x5	13x11x7
0.022	13x9x5	13x10.5x5.5	13x12.5x8.5
0.033	13x9x5.5	13x11x6.5	18x11.5x7.5
0.047	13x9.5x5.5	13x11x7.5	18x13.5x8.5
0.068	13x10.5x6	18x11x6.5	18x15.5x9.5
0.10	13x11x7	18x12.5x7.5	26x15x10
0.15	18x11x7	26x13x7.5	26x17x11
0.22	18x12.5x7.5	26x14x8.5	31x17.5x10.5
0.33	18x13x8.5	26x15x10	31x21.5x13
0.47	26x14x8.5	31x16.5x10.5	31x24.5x15.5
0.68	26x15x9.5		
1.0	26x16x12	31x22x15	
1.5	31x18x13		
2.2	31x21x15		

Convert to inches, divide by 25.4

LxHxT(mm)

	L	13	18	26	31
S	10.0	15.0	22.5	27.5	
G	1.0	1.0	2.0	2.0	
d	0.6	0.8	0.8	0.8	

