



Metallized Polypropylene Film Capacitors

+105°C Epoxy Dipped, Radial Lead

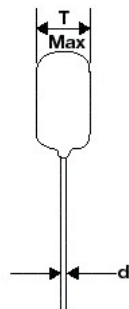
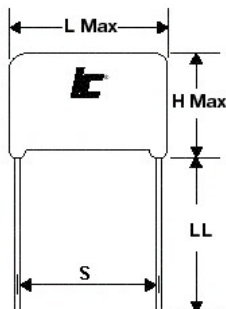
FEATURES

Small size – Low ESR – Good Pulse Capabilities – Stable with Frequency and Temperature

APPLICATIONS

General Purpose – Switching Power Supplies – Blocking – Coupling – AC Applications (Not across the Line)

| | | | | | | |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------|------------|-----------------------|------------|---------------------|
| Operating Temperature Range | -55°C to +105°C | | | | | |
| Capacitance Tolerance | ±10% at 1 kHz, 25°C ±5% optional | | | | | |
| Peak, AC voltage (50/60 Hz) | WVDC | 100 | 250 | 400 | 630 | 1000 |
| | VAC | 63 | 200 | 220 | 250 | 300 |
| For T>+85°C, The voltage must be decreased by 1.5% per °C | | | | | | |
| Dissipation Factor (MAX) 25°C | Frequency (kHz) | C≤0.1uF | | 0.1uF<C≤1uF | | 1uF<C≤3uF |
| | 1 | 0.1% | | 0.1% | | 0.1% |
| | 100 | 0.4% | | 0.7% | | 1.2% |
| Insulation Resistance @25°C (<70% RH) for 1 minute at 100VDC applied | Capacitance | Insulation Resistance | | | | |
| | ≤0.33μF | 30000 MΩ | | | | |
| | >0.33μF | 10000 MΩxμF | | | | |
| Load Life | 2000 Hours, +85C with 125% of rated voltage | | | | | |
| | Capacitance Change | ≤3% of initially measured value | | | | |
| | Dissipation Factor | ≤0.001 at 1kHz and 25°C | | | | |
| | Insulation Resistance | ≥50% of maximum specified value | | | | |
| Damp Heat test | 56 days at40°C with 90 to 95%RH, +40°C and no voltage applied | | | | | |
| | Capacitance Change | ≤3% of initially measured value | | | | |
| | Dissipation Factor | ≤0.001 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 | <0.5% after 2 years at 40°C | | | | | |
| Capacitance Temperature Coefficient | -200 ppm/°C, ±100ppm/°C | | | | | |
| Dielectric Strength | Terminal to Terminal | | | | | |
| | 160% of rated VDC or VAC applied for 2 Seconds and 25°C | | | | | |
| Dielectric | Polypropylene | | | | | |
| Construction | Metallized film | | | | | |
| Coating | Flame Retardant epoxy resin (UL94V0) | | | | | |
| Leads | Lead free tinned copper leads | | | | | |



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

MPR

Metallized Polypropylene
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 | 103MPR400K | 350 | 13x9x5 | 10 | 0.6 |
| 0.01 | 630 | 103MPR630K | 420 | 13x10x6 | 10 | 0.6 |
| 0.015 | 250 | 153MPR250K | 220 | 13x9x5 | 10 | 0.6 |
| 0.015 | 400 | 153MPR400K | 350 | 13x9.5x5 | 10 | 0.6 |
| 0.015 | 630 | 153MPR630K | 420 | 13x11x7 | 10 | 0.6 |
| 0.022 | 250 | 223MPR250K | 220 | 13x9x5 | 10 | 0.6 |
| 0.022 | 400 | 223MPR400K | 350 | 13x10.5x5.5 | 10 | 0.6 |
| 0.022 | 630 | 223MPR630K | 420 | 13x12.5x8.5 | 10 | 0.6 |
| 0.033 | 250 | 333MPR250K | 220 | 13x9x5.5 | 10 | 0.6 |
| 0.033 | 400 | 333MPR400K | 350 | 13x11x6.5 | 10 | 0.6 |
| 0.033 | 630 | 333MPR630K | 400 | 18x11.5x7.5 | 15 | 0.8 |
| 0.047 | 250 | 473MPR250K | 220 | 13x9.5x5.5 | 10 | 0.6 |
| 0.047 | 400 | 473MPR400K | 350 | 13x11x7.5 | 10 | 0.6 |
| 0.047 | 630 | 473MPR630K | 400 | 18x13.5x8.5 | 15 | 0.8 |
| 0.068 | 250 | 683MPR250K | 220 | 13x10.5x6 | 10 | 0.6 |
| 0.068 | 400 | 683MPR400K | 300 | 18x12x6.5 | 15 | 0.8 |
| 0.068 | 630 | 683MPR630K | 400 | 18x15.5x9.5 | 15 | 0.8 |
| 0.1 | 250 | 104MPR250K | 220 | 13x11x7 | 10 | 0.6 |
| 0.1 | 400 | 104MPR400K | 300 | 18x12.5x7.5 | 15 | 0.8 |
| 0.1 | 630 | 104MPR630K | 230 | 26x15x10 | 22.5 | 0.8 |

| Capacitance (μF) | WVDC | IC PART NUMBER | dv/dt (v/μ sec.) | Dims LxHxT (mm) | S (MM) | d (MM) |
|------------------|------|----------------------------|------------------|-----------------|--------|--------|
| 0.15 | 250 | 154MPR250K | 200 | 18x11x7 | 15 | 0.8 |
| 0.15 | 400 | 154MPR400K | 185 | 26x13x7.5 | 22.5 | 0.8 |
| 0.15 | 630 | 154MPR630K | 230 | 26x17x11 | 22.5 | 0.8 |
| 0.22 | 250 | 224MPR250K | 200 | 18x12.5x7.5 | 15 | 0.8 |
| 0.22 | 400 | 224MPR400K | 165 | 26x14x8.5 | 22.5 | 0.8 |
| 0.22 | 630 | 224MPR630K | 180 | 31x17.5x10.5 | 27.5 | 0.8 |
| 0.22 | 1000 | 224MPR102K | 135 | 31x18x9 | 27.5 | 0.8 |
| 0.33 | 250 | 334MPR250K | 200 | 18x13x8.5 | 15 | 0.8 |
| 0.33 | 400 | 334MPR400K | 165 | 26x15x10 | 22.5 | 0.8 |
| 0.33 | 630 | 334MPR630K | 180 | 31x21.5x13 | 27.5 | 0.8 |
| 0.47 | 100 | 474MPR100K | 100 | 18.5x14x8 | 15 | 0.8 |
| 0.47 | 250 | 474MPR250K | 110 | 26x14x8.5 | 22.5 | 0.8 |
| 0.47 | 400 | 474MPR400K | 150 | 31x16.5x10.5 | 27.5 | 0.8 |
| 0.47 | 630 | 474MPR630K | 180 | 31x24.5x15.5 | 27.5 | 0.8 |
| 0.47 | 1000 | 474MPR102K | 135 | 31x22x13 | 27.5 | 0.8 |
| 0.68 | 250 | 684MPR250K | 115 | 26x15x9.5 | 22.5 | 0.8 |
| 1 | 250 | 105MPR250K | 110 | 26x16x12 | 22.5 | 0.8 |
| 1 | 400 | 105MPR400K | 150 | 31x22x15 | 27.5 | 0.8 |
| 1.5 | 250 | 155MPR250K | 100 | 31x18x13 | 27.5 | 0.8 |
| 2.2 | 250 | 225MPR250K | 100 | 31x21x15 | 27.5 | 0.8 |