



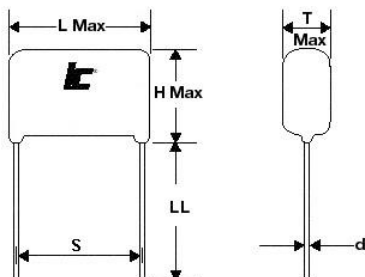
#### FEATURES

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 | 3uF<C≤5uF | C>5uF |
|                                                                     | 1                                                             | 0.1%    |                       | 0.1%                            |     | 0.1%      | 0.1%      | 0.1%  |
|                                                                     | 100                                                           | 0.4%    |                       | 0.7%                            |     | 1.2%      | 1.8%      | 2.8%  |
| 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

| WVDC | Capacitance (μF) | IC PART NUMBER             | dv/dt (v/μ sec.) | Dims LxHxT (mm) | S (MM) | d (MM) |
|------|------------------|----------------------------|------------------|-----------------|--------|--------|
| 100  | 0.47             | <a href="#">474MPR100K</a> | 100              | 18.5x14x8       | 15     | 0.8    |
| 250  | 0.015            | <a href="#">153MPR250K</a> | 220              | 13x9x5          | 10     | 0.6    |
| 250  | 0.022            | <a href="#">223MPR250K</a> | 220              | 13x9x5          | 10     | 0.6    |
| 250  | 0.033            | <a href="#">333MPR250K</a> | 220              | 13x9x5.5        | 10     | 0.6    |
| 250  | 0.047            | <a href="#">473MPR250K</a> | 220              | 13x9.5x5.5      | 10     | 0.6    |
| 250  | 0.068            | <a href="#">683MPR250K</a> | 220              | 13x10.5x6       | 10     | 0.6    |
| 250  | 0.1              | <a href="#">104MPR250K</a> | 220              | 13x11x7         | 10     | 0.6    |
| 250  | 0.15             | <a href="#">154MPR250K</a> | 200              | 18x11x7         | 15     | 0.8    |
| 250  | 0.22             | <a href="#">224MPR250K</a> | 200              | 18x12.5x7.5     | 15     | 0.8    |
| 250  | 0.33             | <a href="#">334MPR250K</a> | 200              | 18x13x8.5       | 15     | 0.8    |
| 250  | 0.47             | <a href="#">474MPR250K</a> | 110              | 26x14x8.5       | 22.5   | 0.8    |
| 250  | 0.68             | <a href="#">684MPR250K</a> | 115              | 26x15x9.5       | 22.5   | 0.8    |
| 250  | 1                | <a href="#">105MPR250K</a> | 110              | 26x16x12        | 22.5   | 0.8    |
| 250  | 1.5              | <a href="#">155MPR250K</a> | 100              | 31x18x13        | 27.5   | 0.8    |
| 250  | 2.2              | <a href="#">225MPR250K</a> | 100              | 31x21x15        | 27.5   | 0.8    |
| 400  | 0.01             | <a href="#">103MPR400K</a> | 350              | 13x9x5          | 10     | 0.6    |
| 400  | 0.015            | <a href="#">153MPR400K</a> | 350              | 13x9.5x5        | 10     | 0.6    |
| 400  | 0.022            | <a href="#">223MPR400K</a> | 350              | 13x10.5x5.5     | 10     | 0.6    |
| 400  | 0.033            | <a href="#">333MPR400K</a> | 350              | 13x11x6.5       | 10     | 0.6    |
| 400  | 0.047            | <a href="#">473MPR400K</a> | 350              | 13x11x7.5       | 10     | 0.6    |

| WVDC | Capacitance (μF) | IC PART NUMBER             | dv/dt (v/μ sec.) | Dims LxHxT (mm) | S (MM) | d (MM) |
|------|------------------|----------------------------|------------------|-----------------|--------|--------|
| 400  | 0.068            | <a href="#">683MPR400K</a> | 300              | 18x12x6.5       | 15     | 0.8    |
| 400  | 0.1              | <a href="#">104MPR400K</a> | 300              | 18x12.5x7.5     | 15     | 0.8    |
| 400  | 0.15             | <a href="#">154MPR400K</a> | 185              | 26x13x7.5       | 22.5   | 0.8    |
| 400  | 0.22             | <a href="#">224MPR400K</a> | 165              | 26x14x8.5       | 22.5   | 0.8    |
| 400  | 0.33             | <a href="#">334MPR400K</a> | 165              | 26x15x10        | 22.5   | 0.8    |
| 400  | 0.47             | <a href="#">474MPR400K</a> | 150              | 31x16.5x10.5    | 27.5   | 0.8    |
| 400  | 1                | <a href="#">105MPR400K</a> | 150              | 31x22x15        | 27.5   | 0.8    |
| 630  | 0.01             | <a href="#">103MPR630K</a> | 420              | 13x10x6         | 10     | 0.6    |
| 630  | 0.015            | <a href="#">153MPR630K</a> | 420              | 13x11x7         | 10     | 0.6    |
| 630  | 0.022            | <a href="#">223MPR630K</a> | 420              | 13x12.5x8.5     | 10     | 0.6    |
| 630  | 0.033            | <a href="#">333MPR630K</a> | 400              | 18x11.5x7.5     | 15     | 0.8    |
| 630  | 0.047            | <a href="#">473MPR630K</a> | 400              | 18x13.5x8.5     | 15     | 0.8    |
| 630  | 0.068            | <a href="#">683MPR630K</a> | 400              | 18x15.5x9.5     | 15     | 0.8    |
| 630  | 0.1              | <a href="#">104MPR630K</a> | 230              | 26x15x10        | 22.5   | 0.8    |
| 630  | 0.15             | <a href="#">154MPR630K</a> | 230              | 26x17x11        | 22.5   | 0.8    |
| 630  | 0.22             | <a href="#">224MPR630K</a> | 180              | 31x17.5x10.5    | 27.5   | 0.8    |
| 630  | 0.33             | <a href="#">334MPR630K</a> | 180              | 31x21.5x13      | 27.5   | 0.8    |
| 630  | 0.47             | <a href="#">474MPR630K</a> | 180              | 31x24.5x15.5    | 27.5   | 0.8    |
| 1000 | 0.22             | <a href="#">224MPR102K</a> | 135              | 31x18x9         | 27.5   | 0.8    |
| 1000 | 0.47             | <a href="#">474MPR102K</a> | 135              | 31x22x13        | 27.5   | 0.8    |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Cornell Dubilier:

[224MPR400K](#) [103MPR630K](#) [224MPR250K](#) [104MPR400K](#) [104MPR630K](#) [473MPR630K](#) [103MPR400K](#)  
[474MPR250K](#) [105MPR250K](#) [225MPR250K](#) [105MPR400K](#) [223MPR630K](#) [104MPR250K](#) [683MPR250K](#)  
[224MPR630K](#) [223MPR250K](#) [684MPR250K](#) [474MPR400K](#) [154MPR630K](#) [474MPR630K](#) [683MPR400K](#)  
[473MPR400K](#)