

# Type DPM Polypropylene Film Capacitors

## Metallized, Radial Leads

## Great for High Frequency Switching Power Supplies



**Type DPM** radial-leaded, metallized polypropylene capacitors boast non-inductive windings with welded lead terminations which handle high continuous currents. The low ESR and low ESL are a glove fit for high frequency and switching power supply applications.



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

## Specifications

**Voltage Range:** 250 to 630 Vdc (160 to 250 Vac, 60 Hz)

**Capacitance Range:** .01 to 6.8  $\mu$ F

**Capacitance Tolerance:**  $\pm 10\%$  (K) standard  
 $\pm 5\%$  (J) optional

**Operating Temperature Range:**  $-55^{\circ}\text{C}$  to  $105^{\circ}\text{C}^*$

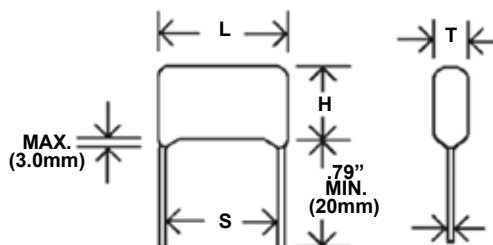
\*Full-rated voltage at  $85^{\circ}\text{C}$ —Derate linearly to 50%-rated voltage at  $105^{\circ}\text{C}$

**Dielectric Strength:** 175% (1 minute)

**Dissipation Factor:** .10% Max. ( $25^{\circ}\text{C}$ , 1 kHz)

**Insulation Resistance:** 10,000  $\text{M}\Omega \times \mu\text{F}$   
30,000  $\text{M}\Omega$  Min.

**Life Test:** 1,000 hours at  $85^{\circ}\text{C}$  at 125% rated voltage



**NOTE:** Other capacitance values, sizes and performance specifications are available. Contact us.

## Ratings

| Cap.<br>( $\mu$ F)       | Catalog<br>Part Number | T Max.<br>Inches(mm) | H Max.<br>Inches(mm) | L Max.<br>Inches(mm) | S $\pm .06$ ( $\pm 1.5$ )<br>Inches(mm) | d<br>Inches(mm) | dV/dt<br>V/ $\mu$ s |
|--------------------------|------------------------|----------------------|----------------------|----------------------|-----------------------------------------|-----------------|---------------------|
| <b>250 Vdc (160 Vac)</b> |                        |                      |                      |                      |                                         |                 |                     |
| .010                     | DPM2S1K-F              | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .015                     | DPM2S15K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .022                     | DPM2S22K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .033                     | DPM2S33K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .047                     | DPM2S47K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .068                     | DPM2S68K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .10                      | DPM2P1K-F              | 0.315(8.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                             | 0.024(0.6)      | 34                  |
| .15                      | DPM2P15K-F             | 0.315(8.0)           | 0.512(13.0)          | 0.709(18.0)          | 0.591(15.0)                             | 0.032(0.8)      | 23                  |
| .22                      | DPM2P22K-F             | 0.315(8.0)           | 0.512(13.0)          | 0.709(18.0)          | 0.591(15.0)                             | 0.032(0.8)      | 23                  |
| .33                      | DPM2P33K-F             | 0.354(9.0)           | 0.591(15.0)          | 0.709(18.0)          | 0.591(15.0)                             | 0.032(0.8)      | 23                  |
| .47                      | DPM2P47K-F             | 0.394(10.0)          | 0.630(16.0)          | 1.024(26.0)          | 0.886(22.5)                             | 0.032(0.8)      | 19                  |
| .68                      | DPM2P68K-F             | 0.394(10.0)          | 0.630(16.0)          | 1.024(26.0)          | 0.886(22.5)                             | 0.032(0.8)      | 19                  |

# Type DPM Polypropylene Film Capacitors

| Cap.<br>( $\mu$ F)       | Catalog<br>Part Number | T Max.<br>Inches(mm) | H Max.<br>Inches(mm) | L Max.<br>Inches(mm) | S $\pm$ .06 ( $\pm$ 1.5)<br>Inches(mm) | d<br>Inches(mm) | dV/dt<br>V/ $\mu$ s |
|--------------------------|------------------------|----------------------|----------------------|----------------------|----------------------------------------|-----------------|---------------------|
| <b>250 Vdc (160 Vac)</b> |                        |                      |                      |                      |                                        |                 |                     |
| 1.00                     | DPM2W1K-F              | 0.473(12.0)          | 0.788(20.0)          | 1.024(26.0)          | 0.886(22.5)                            | 0.032(0.8)      | 19                  |
| 1.50                     | DPM2W1P5K-F            | 0.551(14.0)          | 0.866(22.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 14                  |
| 2.20                     | DPM2W2P2K-F            | 0.591(15.0)          | 0.945(24.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 14                  |
| 3.30                     | DPM2W3P3K-F            | 0.670(17.0)          | 1.063(27.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 8                   |
| 4.70                     | DPM2W4P7K-F            | 0.788(20.0)          | 1.182(30.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 8                   |
| 6.80                     | DPM2W6P8K-F            | 0.906(23.0)          | 1.300(33.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 8                   |
| <b>400 Vdc (220 Vac)</b> |                        |                      |                      |                      |                                        |                 |                     |
| .010                     | DPM4S1K-F              | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 51                  |
| .015                     | DPM4S15K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 51                  |
| .022                     | DPM4S22K-F             | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 51                  |
| .033                     | DPM4S33K-F             | 0.315(8.0)           | 0.473(12.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 51                  |
| .047                     | DPM4S47K-F             | 0.315(8.0)           | 0.473(12.0)          | 0.709(18.0)          | 0.591(15.0)                            | 0.024(0.6)      | 35                  |
| .068                     | DPM4S68K-F             | 0.315(8.0)           | 0.512(13.0)          | 0.709(18.0)          | 0.591(15.0)                            | 0.032(0.8)      | 35                  |
| .10                      | DPM4P1K-F              | 0.354(9.0)           | 0.551(14.0)          | 0.709(18.0)          | 0.591(15.0)                            | 0.032(0.8)      | 35                  |
| .15                      | DPM4P15K-F             | 0.315(8.0)           | 0.591(15.0)          | 1.024(26.0)          | 0.886(22.5)                            | 0.032(0.8)      | 26                  |
| .22                      | DPM4P22K-F             | 0.394(10.0)          | 0.630(16.0)          | 1.024(26.0)          | 0.886(22.5)                            | 0.032(0.8)      | 26                  |
| .33                      | DPM4P33K-F             | 0.433(11.0)          | 0.709(18.0)          | 1.024(26.0)          | 0.886(22.5)                            | 0.032(0.8)      | 26                  |
| .47                      | DPM4P47K-F             | 0.433(11.0)          | 0.709(18.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 17                  |
| .68                      | DPM4P68K-F             | 0.551(14.0)          | 0.866(22.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 17                  |
| 1.00                     | DPM4W1K-F              | 0.630(16.0)          | 0.985(25.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 17                  |
| 1.50                     | DPM4W1P5K-F            | 0.670(17.0)          | 0.985(25.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 11                  |
| 2.20                     | DPM4W2P2K-F            | 0.788(20.0)          | 1.103(28.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 11                  |
| 3.30                     | DPM4W3P3K-F            | 0.945(24.0)          | 1.300(33.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 11                  |
| <b>630 Vdc (250 Vac)</b> |                        |                      |                      |                      |                                        |                 |                     |
| .010                     | DPM6S1K-F              | 0.276(7.0)           | 0.433(11.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 69                  |
| .015                     | DPM6S15K-F             | 0.276(7.0)           | 0.473(12.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 69                  |
| .022                     | DPM6S22K-F             | 0.315(8.0)           | 0.512(13.0)          | 0.512(13.0)          | 0.394(10.0)                            | 0.024(0.6)      | 69                  |
| .033                     | DPM6S33K-F             | 0.315(8.0)           | 0.512(13.0)          | 0.709(18.0)          | 0.591(15.0)                            | 0.032(0.8)      | 48                  |
| .047                     | DPM6S47K-F             | 0.354(9.0)           | 0.591(15.0)          | 0.709(18.0)          | 0.591(15.0)                            | 0.032(0.8)      | 48                  |
| .068                     | DPM6S68K-F             | 0.394(10.0)          | 0.630(16.0)          | 0.709(18.0)          | 0.591(15.0)                            | 0.032(0.8)      | 48                  |
| .10                      | DPM6P1K-F              | 0.394(10.0)          | 0.610(15.5)          | 1.024(26.0)          | 0.886(22.5)                            | 0.032(0.8)      | 36                  |
| .15                      | DPM6P15K-F             | 0.473(12.0)          | 0.709(18.0)          | 1.024(26.0)          | 0.886(22.5)                            | 0.032(0.8)      | 36                  |
| .22                      | DPM6P22K-F             | 0.473(12.0)          | 0.866(22.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 33                  |
| .33                      | DPM6P33K-F             | 0.512(13.0)          | 0.866(22.0)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 33                  |
| .47                      | DPM6P47K-F             | 0.591(15.0)          | 0.965(24.5)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 33                  |
| .68                      | DPM6P68K-F             | 0.610(15.5)          | 1.083(27.5)          | 1.260(32.0)          | 1.083(27.5)                            | 0.032(0.8)      | 33                  |
| 1.00                     | DPM6W1K-F              | 0.748(19.0)          | 1.182(30.0)          | 1.851(47.0)          | 1.575(40.0)                            | 0.032(0.8)      | 22                  |

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