

Type WMC Polyester Film/Foil Capacitors

Axial Lead, Miniature Size for Automatic Insertion



Type WMC axial-lead polyester film/foil capacitors are ideal for automatic insertion in printed circuit boards. It is an ultraminiature version of Type WMF and the sections of these non-inductive capacitors are constructed with extended foil, polyester film, with tinned copper-clad steel leads.

Highlights

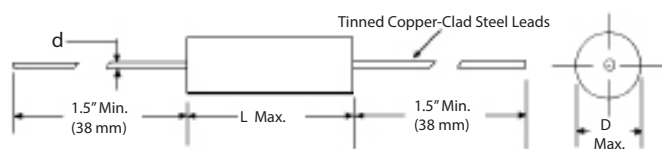
- Miniature Size
- Available on tape and reel
- Film/foil construction, non-inductive design
- High dV/dt ratings
- Good for high pulse applications

Specifications

| | |
|-------------------------------------|---|
| Capacitance Range | ..001 μ F to .47 μ F |
| Capacitance Tolerance @ 1 kHz/25 °C | \pm 10% Standard Tolerance, \pm 5% (Optional) |
| Rated Voltage | 80 to 400 Vdc |
| Operating Temperature Range | -55 °C to 125 °C* *Full rated voltage at 85 °C - derated linearly to 50% rated at 125 °C |
| Insulation Resistance | 30,000 M Ω x μ F, 100,000 M Ω Min. |
| Dissipation Factor | .75% Max. (25 °C, 1 kHz) |
| Dielectric Strength | 250% of rated voltage for 1 minute |
| Life Test | 250 Hours at 85 °C at 125% Rated Voltage |

Regulatory Information

Outline Drawing



Lead Diameters:

No. 24 AWG to .282" (6.35mm) diameter

No. 22 AWG .283" (6.38mm) diameter and up

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

Pulse Ratings

| Pulse Capability | | | | | |
|------------------|--|-----------|-----------|-------|-------|
| Rated Voltage | Body Length | | | | |
| | $\leq .437$ | .531-.593 | .656-.718 | 0.906 | 1.218 |
| | dV/dt — volts per microsecond, maximum | | | | |
| 80 | 5000 | 2100 | 1500 | 900 | 690 |
| 200 | 10800 | 5000 | 3000 | 1700 | 1260 |
| 400 | 30700 | 14500 | 9600 | 3600 | 2600 |

Ratings

| Cap (μ F) | Catalog Part Number | D Inches (mm) | L Inches (mm) | d Inches (mm) |
|----------------|---------------------|---------------|---------------|---------------|
| 80 Vdc | | | | |
| 0.0010 | WMC08D1K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0012 | WMC08D12K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0015 | WMC08D15K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0018 | WMC08D18K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0022 | WMC08D22K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0027 | WMC08D27K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |

| Cap (μ F) | Catalog Part Number | D Inches (mm) | L Inches (mm) | d Inches (mm) |
|----------------|---------------------|---------------|---------------|---------------|
| 80 Vdc | | | | |
| 0.0033 | WMC08D33K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0039 | WMC08D39K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0047 | WMC08D47K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0056 | WMC08D56K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0068 | WMC08D68K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0082 | WMC08D82K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |

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| Cap (μ F) | Catalog Part Number | D Inches (mm) | L Inches (mm) | d Inches (mm) |
|--------------------|------------------------|------------------|------------------|------------------|
| 80 Vdc | | | | |
| 0.010 | WMC08S1K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.012 | WMC08S12K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.015 | WMC08S15K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.018 | WMC08S18K-F | .185 (4.7) | .531 (13.5) | .020 (.5) |
| 0.022 | WMC08S22K-F | .185 (4.7) | .531 (13.5) | .020 (.5) |
| 0.027 | WMC08S27K-F | .229 (5.8) | .468 (11.9) | .020 (.5) |
| 0.033 | WMC08S33K-F | .229 (5.8) | .468 (11.9) | .020 (.5) |
| 0.039 | WMC08S39K-F | .229 (5.8) | .593 (15.1) | .020 (.5) |
| 0.047 | WMC08S47K-F | .229 (5.8) | .593 (15.1) | .020 (.5) |
| 0.056 | WMC08S56K-F | .250 (6.3) | .593 (15.1) | .020 (.5) |
| 0.068 | WMC08S68K-F | .250 (6.3) | .593 (15.1) | .020 (.5) |
| 0.082 | WMC08S82K-F | .343 (8.7) | .531 (13.5) | .024 (.6) |
| 0.10 | WMC08P1K-F | .343 (8.7) | .531 (13.5) | .024 (.6) |
| 0.12 | WMC08P12K-F | .343 (8.7) | .656 (16.7) | .024 (.6) |
| 0.15 | WMC08P15K-F | .343 (8.7) | .656 (16.7) | .024 (.6) |
| 0.18 | WMC08P18K-F | .382 (9.7) | .656 (16.7) | .024 (.6) |
| 0.22 | WMC08P22K-F | .382 (9.7) | .656 (16.7) | .024 (.6) |
| 0.27 | WMC08P27K-F | .382 (9.7) | .905 (23.0) | .024 (.6) |
| 0.33 | WMC08P33K-F | .382 (9.7) | .905 (23.0) | .024 (.6) |
| 0.39 | WMC08P39K-F | .382 (9.7) | 1.218 (30.9) | .024 (.6) |
| 0.47 | WMC08P47K-F | .382 (9.7) | 1.218 (30.9) | .024 (.6) |
| 200/250 Vdc | | | | |
| 0.0010 | WMC2D1K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0012 | WMC2D12K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0015 | WMC2D15K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0018 | WMC2D18K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0022 | WMC2D22K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0027 | WMC2D27K-F | .185 (4.7) | .406 (10.3) | .020 (.5) |
| 0.0033 | WMC2D33K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0039 | WMC2D39K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0047 | WMC2D47K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0056 | WMC2D56K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0068 | WMC2D68K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0082 | WMC2D82K-F | .185 (4.7) | .531 (13.5) | .020 (.5) |
| 0.010 | WMC2S1K-F | .185 (4.7) | .531 (13.5) | .020 (.5) |
| 0.012 | WMC2S12K-F | .229 (5.8) | .468 (11.9) | .020 (.5) |
| 0.015 | WMC2S15K-F | .229 (5.8) | .468 (11.9) | .020 (.5) |
| 0.018 | WMC2S18K-F | .229 (5.8) | .656 (16.7) | .020 (.5) |

| Cap (μ F) | Catalog Part Number | D Inches (mm) | L Inches (mm) | d Inches (mm) |
|--------------------|------------------------|------------------|------------------|------------------|
| 200/250 Vdc | | | | |
| 0.022 | WMC2S22K-F | .229 (5.8) | .656 (16.7) | .020 (.5) |
| 0.027 | WMC2S27K-F | .250 (6.3) | .656 (16.7) | .020 (.5) |
| 0.033 | WMC2S33K-F | .250 (6.3) | .656 (16.7) | .020 (.5) |
| 0.039 | WMC2S39K-F | .343 (8.7) | .531 (13.5) | .024 (.6) |
| 0.047 | WMC2S47K-F | .343 (8.7) | .531 (13.5) | .024 (.6) |
| 0.056 | WMC2S56K-F | .343 (8.7) | .656 (16.7) | .024 (.6) |
| 0.068 | WMC2S68K-F | .343 (8.7) | .656 (16.7) | .024 (.6) |
| 0.082 | WMC2S82K-F | .382 (9.7) | .656 (16.7) | .024 (.6) |
| 0.10 | WMC2P1K-F | .382 (9.7) | .656 (16.7) | .024 (.6) |
| 0.12 | WMC2P12K-F | .382 (9.7) | .906 (23.0) | .024 (.6) |
| 0.15 | WMC2P15K-F | .382 (9.7) | .906 (23.0) | .024 (.6) |
| 0.18 | WMC2P18K-F | .382 (9.7) | 1.218 (30.9) | .024 (.6) |
| 0.22 | WMC2P22K-F | .382 (9.7) | 1.218 (30.9) | .024 (.6) |
| 400 Vdc | | | | |
| 0.0010 | WMC4D1K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0012 | WMC4D12K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0015 | WMC4D15K-F | .185 (4.7) | .468 (11.9) | .020 (.5) |
| 0.0018 | WMC4D18K-F | .185 (4.7) | .531 (13.5) | .020 (.5) |
| 0.0022 | WMC4D22K-F | .185 (4.7) | .531 (13.5) | .020 (.5) |
| 0.0027 | WMC4D27K-F | .229 (5.8) | .531 (13.5) | .020 (.5) |
| 0.0033 | WMC4D33K-F | .229 (5.8) | .531 (13.5) | .020 (.5) |
| 0.0039 | WMC4D39K-F | .229 (5.8) | .531 (13.5) | .020 (.5) |
| 0.0047 | WMC4D47K-F | .229 (5.8) | .531 (13.5) | .020 (.5) |
| 0.0056 | WMC4D56K-F | .250 (6.3) | .656 (16.7) | .020 (.5) |
| 0.0068 | WMC4D68K-F | .250 (6.3) | .656 (16.7) | .020 (.5) |
| 0.0082 | WMC4D82K-F | .250 (6.3) | .656 (16.7) | .020 (.5) |
| 0.010 | WMC4S1K-F | .250 (6.3) | .656 (16.7) | .020 (.5) |
| 0.012 | WMC4S12K-F | .343 (8.7) | .593 (15.1) | .024 (.6) |
| 0.015 | WMC4S15K-F | .343 (8.7) | .593 (15.1) | .024 (.6) |
| 0.018 | WMC4S18K-F | .343 (8.7) | .718 (18.2) | .024 (.6) |
| 0.022 | WMC4S22K-F | .343 (8.7) | .718 (18.2) | .024 (.6) |
| 0.027 | WMC4S27K-F | .382 (9.7) | .718 (18.2) | .024 (.6) |
| 0.033 | WMC4S33K-F | .382 (9.7) | .718 (18.2) | .024 (.6) |
| 0.039 | WMC4S39K-F | .382 (9.7) | .906 (23.0) | .024 (.6) |
| 0.047 | WMC4S47K-F | .382 (9.7) | .906 (23.0) | .024 (.6) |
| 0.056 | WMC4S56K-F | .382 (9.7) | 1.218 (30.9) | .024 (.6) |
| 0.068 | WMC4S68K-F | .382 (9.7) | 1.218 (30.9) | .024 (.6) |

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