Type MV Low Resistance Power Film Resistors

Values from 0.1 ohm to 50 ohms with Exclusive Non-Inductive Design

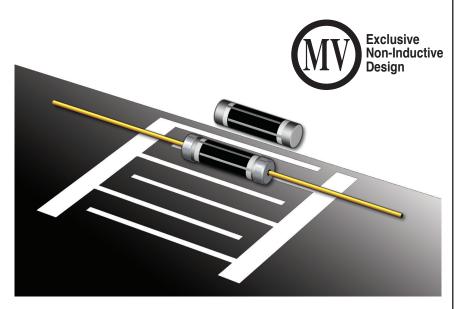
Type MV Low Resistance Power Film Resistors combine Caddock's Exclusive Non-Inductive Design with many high performance capabilities of Micronox® resistance films to achieve these special advantages:

- · Low Resistance from 0.1 ohm to 50 ohms.
- Maximum Operating Temperature up to +275°C.
- · Five Sizes and Power Ratings.
- Full Power Ratings without derating for Non-Inductive Performance.
- See MP900 Series Power Resistor Products for Resistances as Low as 0.005Ω.

The interdigitated terminations in the Type MV resistors provide a multiple-path distribution of the current into parallel resistance sections, which provides low resistance values and non-inductive performance. This Exclusive Non-Inductive Design provides significant performance improvements in high speed or inductance sensitive electronic circuits, including high performance power amplifiers, high-speed data transmission systems, high frequency video amplifiers, current switching circuits, and current sensing circuits.

| MV217 | ALC- |
|--------|----------------|
| MV 228 | |
| MV234 | MV 234 1,00 |
| MV 261 | MV 261 |
| MV311 | MV 311 |

| Model No. | Watt- age | Oper. Temp. (Max.) | Dielect. Strength | Resistance | | Dimensions in inches and (millimeters) | | | Leadwire |
|--------------|--------------|--------------------------|----------------------|------------|------|--|----------------------------|---------------------------|------------|
| | | | | Min. | Max. | Α | В | С | Leauwiie |
| MV217 | 1.5 | 275°C | 800 | 0.20 Ω | 50 Ω | .400 ±.060 (10.16 ±1.52) | .140 ±.030 (3.56 ±.76) | .025 ±.002 (.64 ±.05) | Solderable |
| MV228 | 2.0 | 275°C | 1,000 | 0.10 Ω | 50 Ω | .480 ±.060 (12.19 ±1.52) | .230 ±.030 (5.84 ±.76) | .040 ±.002 (1.02 ±.05) | Solderable |
| MV234 | 3.0 | 275°C | 1,000 | 0.10 Ω | 50 Ω | .570 ±.060 (14.48 ±1.52) | .300 ±.030 (7.62 ±.76) | .040 ±.002 (1.02 ±.05) | Solderable |
| MV261 | 6.0 | 275°C | 1,000 | 0.10 Ω | 50 Ω | .910 ±.060 (23.11 ±1.52) | .350 ±.040 (8.89 ±.76) | .040 ±.002 (1.02 ±.05) | Solderable |
| MV311 | 10.0 | 275°C | 1,000 | 0.10 Ω | 50 Ω | 2.000 ±.080 (50.80 ±2.03) | .350 ±.040 (8.89 ±1.02) | .040 ±.002 (1.02 ±.05) | Solderable |



Ordering Information: MV234 - 0.10 - 1% Model Number: Tolerance Resistor Value:

Specifications:

Resistance Tolerance: ±1% (5% and 10% are also available).

Temperature Coefficient: 5 ohms and above, ± 100 ppm/°C, referenced to +25°C, ΔR taken at -15°C and +105°C.

Below 5 ohms, $\pm (200 \text{ ppm} + 0.00002 \text{ ohm})/^{\circ}\text{C}$, referenced to $+25^{\circ}\text{C}$, ΔR taken at -15°C and $+105^{\circ}\text{C}$.

Insulation Resistance: 10,000 Megohms, min. Momentary Overload: 5 times rated power for 5 seconds, $\Delta R \pm (1 \text{ percent} + 0.001 \text{ ohm}) \text{ max}$.

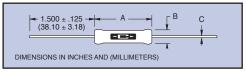
Thermal Shock: Mil-Std-202, Method 107, Cond. C, ΔR ±(1 percent + 0.001 ohm) max.

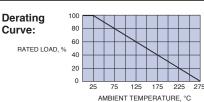
Moisture Resistance: Mil-Std-202, Method 106, $\Delta R \pm (1 \text{ percent} + 0.001 \text{ ohm}) \text{ max}.$

Load Life: 1,000 hours at $\pm 25^{\circ}$ C at rated power, $\Delta R \pm (1 \text{ percent} + 0.001 \text{ ohm})$ max.

Encapsulation: High Temperature Silicone Conformal

Measurement Note: For these specifications, resistance measurement shall be made at a point 0.3 inch (7.62 mm) from the resistor body.





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Caddock:

MV234-0.30 1% MV234-0.25 OHM 1% MV311-17.0-1% MV228-5.0 OHM 1% MV311-10-1% MV234-10.0-5%

MV311-10.0-1% MV228-2.00-1% MV228-2.40-1% MV261-27.0-1% MV261-0.47-1% MV234-10-1% MV217-5.00-1%

MV261-10.0-1% MV217-1.00-1% MV228-5.00-1% MV234-0.25-1% MV234-0.30-1% MV234-10.0-1% MV261-0.20-5%