

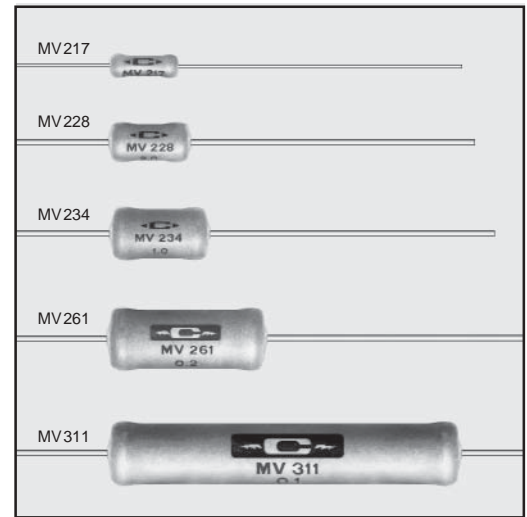
# Type MV Low Resistance Power Film Resistors

## 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.



Model No.	Wattage	Oper. Temp. (Max.)	Dielect. Strength	Resistance		Dimensions in inches and (millimeters)			Leadwire
				Min.	Max.	A	B	C	
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

### Specifications:

**Resistance Tolerance:** ±1% (5%, 10% and 20% 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, ±(200 ppm + 0.00002 ohm)/°C, referenced to +25°C, ΔR taken at -15°C and +105°C.

**Insulation Resistance:** 10,000 Megohms, min.

**Momentary Overload:** 5 times rated power for 5 seconds, ΔR ±(1 percent + 0.001 ohm) max.

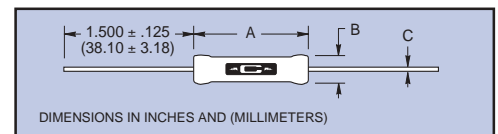
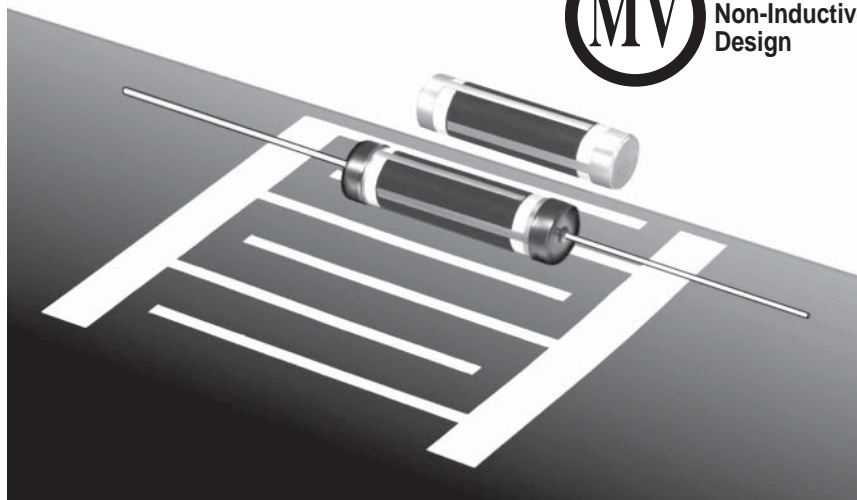
**Thermal Shock:** Mil-Std-202, Method 107, Cond. C, ΔR ±(1 percent + 0.001 ohm) max.

**Moisture Resistance:** Mil-Std-202, Method 106, ΔR ±(1 percent + 0.001 ohm) max.

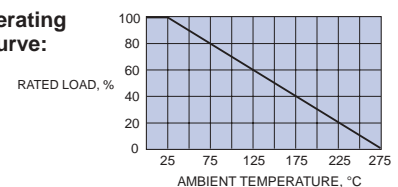
**Load Life:** 1,000 hours at +25°C at rated power, ΔR ±(1 percent + 0.001 ohm) max.

**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.



### Derating Curve:



### Ordering Information:

Model Number: \_\_\_\_\_  
 Resistor Value: \_\_\_\_\_  
 Tolerance: \_\_\_\_\_

**MV234 - 0.1 - 1%**

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