

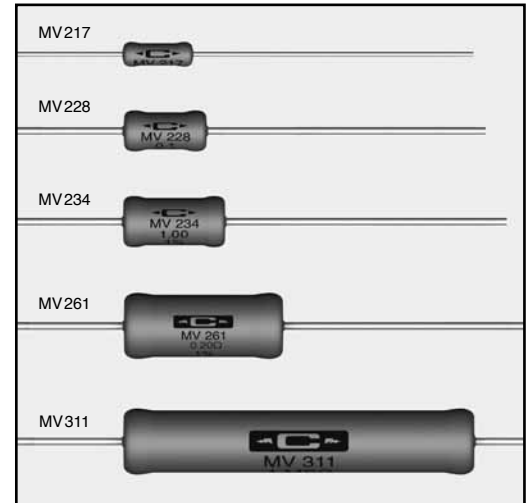
# Type MV Low Resistance Power Film Resistors

## 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.	Watt-age	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% 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, ±(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.

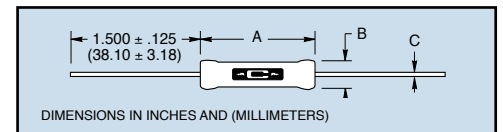
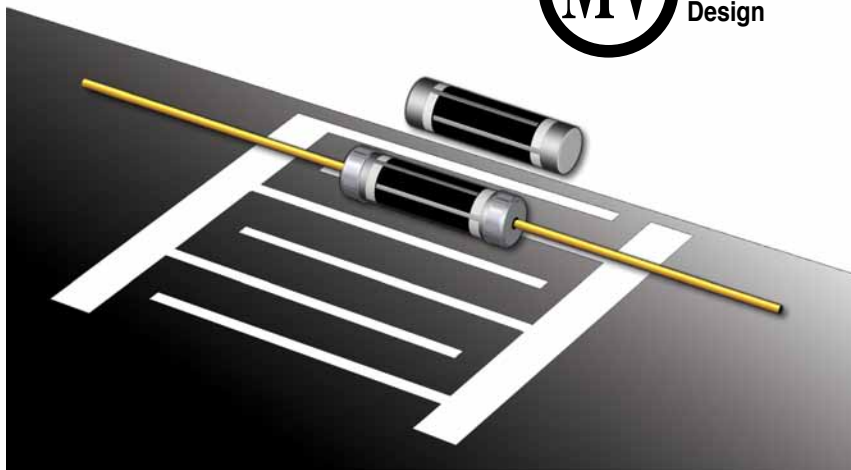
**Thermal Shock:** Mil-Std-202, Method 107, Cond. C, ΔR ±(1 percent + 0.001 ohm) max.

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

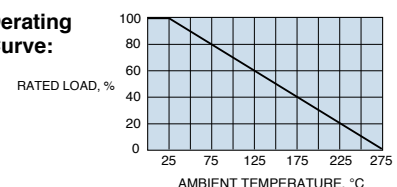
**Load Life:** 1,000 hours at +25°C at rated power, ΔR ±(1 percent + 0.001 ohm) max.

**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:                      **MV234 - 0.10 - 1%**                      Tolerance  
 Resistor Value:                     

Applications Engineering  
 17271 North Umpqua Hwy.  
 Roseburg, Oregon 97470-9422  
 Phone: (541) 496-0700  
 Fax: (541) 496-0408

**CADDOCK ELECTRONICS, INC.**

e-mail: caddock@caddock.com • web: www.caddock.com  
 For Caddock Distributors listed by country see caddock.com/contact/dist.html

Sales and Corporate Office  
 1717 Chicago Avenue  
 Riverside, California 92507-2364  
 Phone: (951) 788-1700  
 Fax: (951) 369-1151