



# CODECO CORPORATION OF VERMONT

## Series: MR

## Ultra Low Value Resistors

VPR has developed a molded ribbon element type resistor to meet the needs of those who design precision instruments for current sensing, voltage regulation, power supplies or any type of electronic instrument that needs extremely low value resistance with the capability of carrying moderate power. This resistor is made by directly welding the copper lead wires directly to the resistive ribbon element by using a proprietary automated percussion welding technique in a controlled atmosphere. The elements are then encapsulated in a specially formulated molding compound. This method insures higher power dissipation and lower temperature build-ups due to this power, resulting in a superior power to size ratio. Another added advantage of this method is the inherent non-inductiveness of the part so that it can be used in any extremely high frequency applications. For added accuracy, we now have available our TMR model with four terminal wires. All MR series parts are RoHS compliant.

### MR Series Standard Specifications



Type	Power (Watts)	Resistance Range ( $\Omega$ )	Length $\pm .010$ "	Diameter $\pm .010$ "	Lead $\pm .010$ "
MR1	1	0.01 to 0.1	.385	.135	.032
MR1A	1	0.01 to 0.1	.427	.115	.025
MR3	3	0.005 to 0.2	.560	.205	.032
MR5	5	0.005 to 0.3	.925	.330	.036
MR10	10	0.01 to 0.5	1.828	.392	.036
TMR3	3	0.005 to 0.2	.625	.205	.032
TMR5	5	0.005 to 0.3	.940	.330	.036

Operating Range: 55°C to 275°C  
 Standard Tolerances: 1%, 3%, 5%  
 Dielectric Strength: 500VAC  
 Insulation Resistance: 10,000 Megohms  
 Short-time Overload: 5 seconds at 5 times the rated power.

**Derating Curve**

