



CERAMIC CEMENT ENCASED RESISTORS

Electrical Specifications for MRW Resistors

Resistance Tolerance: ±5% is standard, ±1% is available on most resistances. Tighter tolerance is available over a limited resistance range.

Temperature Coefficient: ≤1 ohm — 0±800 ppm/°C
>1 ohm — 0±200 ppm/°C

Maximum Working Voltage: \sqrt{PR}

Max Hot Spot Temperature: 275°C

3% max ΔR over 1,500 hour load life for all ceramic encased resistors

Mechanical Specifications for MRW Resistors

Terminal Strength: 5 pounds minimum

Construction: High-grade resistance wire is wound onto a woven fiberglass core. Terminals are tinned copperweld crimped to the wound core with an alloy cap. The assembly is then potted, using a high thermal conducting, high temperature, moisture resistant, inorganic compound, into a ceramic case. This results in a completely fireproof inorganic package.

Available Options for MRW

- *Special Low-ohm construction
- *All welded construction
- *Surge protection
- *Fuse style capability
- *Enhanced protection against liquids
- *Resistances outside the listed ranges
- Contact the factory

How to Order

Mills P/N	TC (ppm/°C)	Config	Ohms	Tolerance	Leads
MRW05	W – Std	R – Radial	use	K – ±10%	M – .032TC
MRW5R	M – 4500		"R" for ohms	J – ±5%	L – .040TC
MRWL10	Q – 3900		"K" for KΩ	F – ±1%	
	N – 6000		as the decimal point		

The Mills Resistor part number is made up of body style, temperature coefficient, ohmic value and tolerance. In calling out the ohmic value, all digits are significant; we use a letter designator as the decimal point for the multiplier. The standard configuration for the MRW series is axial leads with diameters as indicated in the above table (radial leads are possible). The configuration for the Vertical Mount and MRWL resistors is as indicated in the catalog.

Thus the Mills part number MRW05W1R0J calls out a one ohm, five watt resistor with a tolerance of ±5%.