

## RESISTORS FOR THE AUDIO INDUSTRY

Non-magnetic, non-inductive, all welded construction greatly enhances frequency response. Combined with Aryton-Perry winding inductive reactance and signal loss are almost totally eliminated.

Meets or exceeds the specifications in MIL-PRF-26 for wirewound resistors.

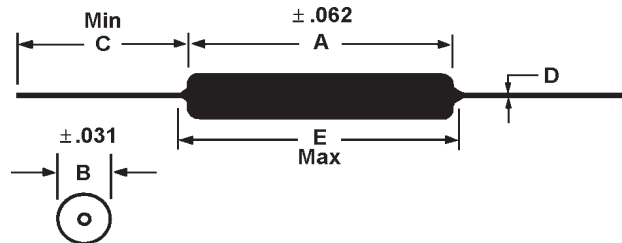
Meets the applicable specifications of MIL-STD-202, method 208

**Core:** Alumina ceramic. This material provides significantly broader heat dissipation compared to that of normal steatite ceramic core.

**Element:** Nickel-chromium or nickel-copper alloys used.

**Leads:** Tinned Copper with Silver-plated endcaps.

General Electric Specifications	
Tolerance	±5% ±1%
Dielectric Strength	MRA05: 500 VAC
	MRA10, MRA12 1000 VAC
TCR	10+ ohms: ±20ppm/°C
	1-10 ohms: ±50ppm/°C
	<1 ohm: ±90ppm/°C
Short Time Overload	MRA05 5 seconds @ 5X rated power
	MRA10, MRA12 5 seconds @ 10X rated power



Mills P/N	Dimensions (in Inches)					Power Rating Watts		Min Ω	Std Range Ω	Max Ω
	A	B	C	D	E	Type U	Type V			
MRA05	0.562	0.167	1.500	0.032	0.650	4.0	5.0	.01	1.0 to 2.0 K	15.0 K
MRA10	0.875	0.312	1.500	0.032	0.975	7.0	10.0	.05	0.5 to 15.0 K	35.0 K
MRA12	1.188	0.312	1.500	0.032	1.280	10.0	12.0	.05	0.5 to 40.0 K	85.0 K

Test	Conditions	Test Limits	
		Type U	Type V
Dielectric Withstanding Voltage	1,000V rms, 1 minute	±(0.1% +0.05Ω) ΔR	±(0.1% +0.05Ω) ΔR
High Frequency Vibration	10 to 2,000Hz, 20g peak, 2 directions 6 hrs ea	±(0.1% +0.05Ω) ΔR	±(0.2% +0.05Ω) ΔR
High Temperature Exposure	250 hrs @ 350°C	±(0.5% +0.05Ω) ΔR	±(4.0% +0.05Ω) ΔR
Load Life	2,000 hrs @ 25°C at rated power, 1.5 hrs ON, 0.5 hrs Off	±(0.5% +0.05Ω) ΔR	±(3.0% +0.05Ω) ΔR
Low Temperature Storage	minus 65°C for 24 hours	±(0.2% +0.05Ω) ΔR	±(2.0% +0.05Ω) ΔR
Moisture Resistance	MIL-STD 202 Method 106	±(0.2% +0.05Ω) ΔR	±(2.0% +0.05Ω) ΔR
Shock, Specified Pulse	MIL-STD 202 Method 213, 100g's for 6milliseconds, 10 shocks	±(0.1% +0.05Ω) ΔR	±(0.2% +0.05Ω) ΔR
Shock, Thermal	Rated power applied till thermally stable, then 15 minutes @ minus 55°C	±(0.2% +0.05Ω) ΔR	±(2.0% +0.05Ω) ΔR
Short Time Overload	5x rated power (.167 diameter and smaller) 10x rated power (.218 diameter and larger)	±(0.2% +0.05Ω) ΔR	±(2.0% +0.05Ω) ΔR
Terminal Strength	10 pound pull test, 5-10 seconds torsion test, 3 directions 360° each	±(0.1% +0.05Ω) ΔR	±(1.0% +0.05W) ΔR