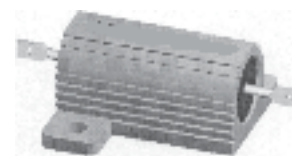




ALUMINUM HOUSED CHASSIS MOUNT RESISTORS

Mills Resistor's high power aluminum housed resistors use centerless ground ceramic cores for uniform heat distribution. Molded in a special high temperature material and mounted in an extruded aluminum finned housing, these designs provide maximum power dissipation and reliability. They have tinned copperweld leads for solderability and meet or exceed both MIL-R-18546 (including "N" characteristic) and MIL-R-39009.



Part#	Military	Power Rating		Resistance		Working Voltage
		Mills	Military	Min	Max	
MRC05	RE-60	7.5W	5W	0.01Ω	22KΩ	160
MRC10	RE-65	12.5W	10W	0.01Ω	47KΩ	265
MRC25	RE-70	25W	20W	0.01Ω	90KΩ	550
MRC50	RE-75	50W	30W	0.01Ω	250KΩ	1250

ENVIRONMENTAL SPECIFICATIONS	
Test	MIL-R-18546
Load Life	±(1%+.05Ω)ΔR
Moisture Resistance	±(1%+.05Ω)ΔR
Resistance Temp Characteristic	±50PPM to 2000Ω ±30PPM over 2000Ω
Thermal Shock	±(0.5%+.05Ω)ΔR
Momentary Overload	±(0.5%+.05Ω)ΔR
Dielectric	±(0.2%+.05Ω)ΔR
High Temp Storage	±(0.5%+.05Ω)ΔR
Shock	±(0.2%+.05Ω)ΔR
Vibration	±(0.2%+.05Ω)ΔR
Terminal Strength	±(0.2%+.05Ω)ΔR

Power Rating based on

- full power operation @ 25°C
- maximum hotspot 275°C
- 1% maximum ΔR in 1000 hr load life
- mounting on a proper heat sink

Heat Sink Requirements

MRC5, MRC10: 4"x6"x2"x.040"

MRC25, MRC50: 5"x7"x2"x.040"

Derating is required for reduced chassis mounting area and for high ambient temperatures (see chart).

Temperature Coefficient of Resistance:

1 to 10Ω: ± 50ppm/°C;

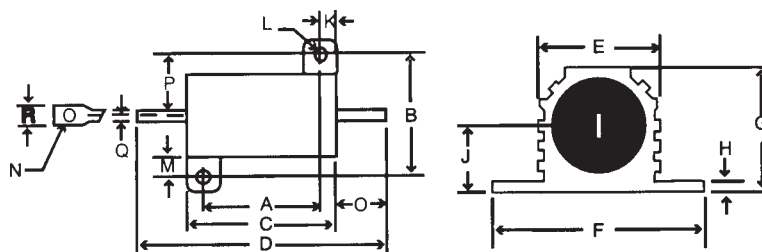
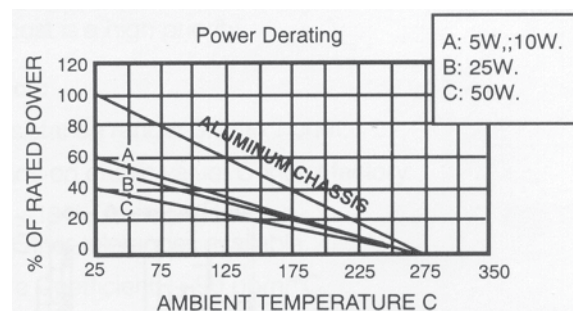
> 10Ω: ± 20ppm/°C

Dielectric Strength:

MRC5, MRC10, MRC25: >1000 VAC

MRC50: >2000 VAC

Operating Temperature Range: -55°C to +275°C.



PART#	A ±.005	B ±.005	C ±.031	D ±.062	E ±.015	F ±.015	G ±.015	H ±.010	J ±.010	K ±.010	L ±.005	M ±.015	N ±.005	O ±.062	P ±.031	Q AWG	R ±.032
MRC05	0.444	0.490	0.600	1.125	0.334	0.646	0.320	0.065	0.140	0.078	0.093	0.078	0.050	0.266	0.245	16	0.085
MRC10	0.562	0.625	0.750	1.375	0.430	0.800	0.400	0.075	0.190	0.093	0.093	0.102	0.086	0.312	0.312	12	0.140
MRC25	0.719	0.781	1.062	1.938	0.530	1.080	0.560	0.085	0.260	0.172	0.125	0.125	0.086	0.438	0.391	12	0.140
MRC50	1.563	0.844	1.968	2.781	0.615	1.140	0.615	0.085	0.300	0.196	0.125	0.125	0.086	0.438	0.422	12	0.140