

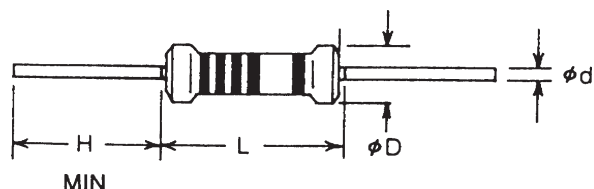
**INTRODUCTION**

Metal Film Resistors are designed to provide MIL performance and reliability at a significantly lower cost. High grade materials make the much smaller space saver size available. Automated production assures uniform quality and low cost.

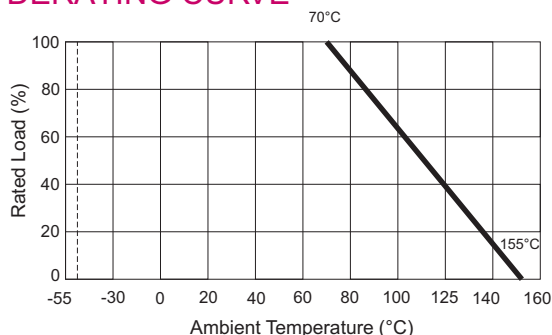
**FEATURES**

- Temperature Coefficients: 25, 50, & 100PPM (1/4 watt standard is 50ppm)
- Tolerance 1%, 0.5%, & 0.1%
- DIN Style 44061

**Dimensions (mm)**



**DERATING CURVE**



**SPECIFICATIONS**

Type	MIL Style	Rated Power (W)		Body(mm)		Lead(mm)		Resistance Range ( )	Max. Working Voltage	Max. Overload Voltage	Standard tape	Packing
		125°C	70°C	L±0.3	D±0.3	H	d±0.05					
MR12	RN50	1/16	1/8	3.8	1.5	20	0.45	10-1M	200	400	T52	5000
MR25	RN55	1/8	1/4	6.5	2.5	20	0.6	1-10M	250	500	T52	5000
MR25M			1/4	3.6	1.6	20	0.5	10-1M	200	400	T52	5000
MR50	RN60	1/3	1/2	9.5	3.5	20	0.7	10-2.4M	350	700	T52	2500
MR50M			1/2	6.3	2.5	20	0.6	5.11-4.7M	350	700	T52	2500
MR100	RN65	3/4	1	11	4.5	20	0.8	5.11-2.4M	500	1000	T73	2000
MR200	RN70	1	2	16	5	20	0.8	5.11-5.11M	750	1000	T73	1000

- Notes:**
- Flame-Proof (MRF) available on request. Meets M11412
  - Lower and higher resistances available on request.
  - Tolerances below 1% require extra lead-time for proper aging.
  - Special tape to tape size by request.

**PERFORMANCE CHARACTERISTICS**

Test Items	MIL SPEC 10509	DIN SPEC 44061	SPEC							
			MR12	MR25	MR25M	MR50	MR50M	MR100	MR200	
Rated Wattage	at 70°C	W	char (D)	.16	.25	.25	.5	.5	1	2
	at 125°C	W	char (D)	.1	.125	.125	.4	.4	.75	1
Max Rated Voltage	Vdc or Vrms			200	250	200	350	350	500	750
Thermic Resistance	K/W			150	150	200	100	140	100	100
Temperature Resistance	%	±0.25	±0.25	±0.20	±0.20	±0.30	±0.20	±0.20	±0.20	±0.20
Low Temp. Operation	%	±0.25	±0.25	±0.15	±0.15	±0.30	±0.15	±0.15	±0.15	±0.15
Short Time Overload	%	±0.25		-0.20	±0.20	±0.25	±0.25	±0.25	±0.25	±0.25
Terminal Strength	%	±0.20	±0.5	-0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10
Dielectric with Standing Voltage	%	±0.25		-0.10	±0.10	±0.15	±0.10	±0.10	±0.10	±0.10
Resistance to Soldering: Heat	%	±0.10	±0.25	-0.01	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10
Insulation Resistance - Dry	MΩ	10000		10000	10000	10000	10000	10000	10000	10000
Insulation Resistance - Wet	MΩ	100		100	100	100	100	100	100	100
Moisture Resistance	%	±0.50	±1.0	±0.40	±0.50	±0.50	±0.50	±0.50	±0.50	±0.50
Life 1000 Hrs	%	±0.50		±0.50	±1.0	±0.10	±1.0	±1.0	±1.0	±1.0
Shock, Medium Impact	%	±0.25	±0.25	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10
Vibration, High Freq.	%	±0.25	±0.25	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10
Shelf-Life, Per Year	%			±0.10	±0.10	±0.10	±0.10	±0.10	±0.10	±0.10
Solderability	% area	95		95	95	95	95	95	95	95

**PART NUMBER EXAMPLE**

MR 25 R - 100K - F (1/4 watt is standard 50ppm so no suffix is needed for 50ppm or 100ppm)

**PART NUMBER EXAMPLE** (With specified Temperature Coefficient)

MR 25 R - 100K - B25

B25 indicates B tolerances (0.1%), 25ppm temperature coefficient