

HERMETIC SEALED PRECISION METAL FILM RESISTORS

HM SERIES



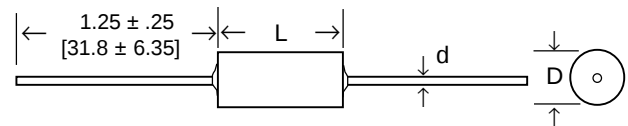
- ☐ Industry's widest range!
- ☐ Tolerances to $\pm 0.01\%$, TC's to $\pm 5\text{ppm}$!
- ☐ Hermetic enclosure enables exceptional environmental stability and physical protection
- ☐ Power levels are above equivalent military ratings!
- ☐ Available on exclusive **SWIFT™** delivery program!
- ☐ Extremely low noise, thermal EMF, and voltage coefficient

OPTIONS

- ☐ OPTION EK : Group A screening per Mil-R-10509
- ☐ OPTION EL: Group A & B screening per Mil-R-10509
- ☐ A variety of options are available including custom sizes, formed leads, matched sets, non-standard values, special lab testing/burn-in, increased power/voltage/pulse capability, etc. Customized components are RCD's specialty!

RCD Series HM hermetically sealed precision metal film resistors are designed for demanding applications including high humidity, salt atmosphere, and other hostile environments. The improved environmental stability is achieved by hermetically sealing the resistor element within the external insulated tube.

The wide choice of resistance values, tolerances, and temperature coefficients exceeds the military range of MIL-PRF-55182, enabling new opportunities for circuit designers.



SPECIFICATIONS

RCD Type	MIL Type ¹	Standard Wattage Rating		Military Wattage Rating		Max. Working Voltage ²	Resistance Range ²	Dimensions		
		70°C	125°C	70°C	125°C			L	D	d
HM55	RNC55 RNR55 RNN55	.2W	.1W	.125W	.1W	200V	10Ω - 1M	.272 ± .024 [6.9 ± .6]	.123 ± .02 [3.1 ± .6]	.024 ± .002 [.6 ± .05]
HM60	RNC60 RNR60 RNN60	.25W	.125W	.25W	.125W	250V	10Ω - 2M	.287 ± .024 [7.3 ± .6]	.134 ± .024 [3.4 ± .6]	.024 ± .002 [.6 ± .05]
HM65	RNC65 RNR65 RNN65	.5W	.25W	.5W	.25W	300V	10Ω - 10M	.630 ± .05 [16 ± 1.2]	.236 ± .032 [6 ± 0.8]	.025 ± .002 [.635 ± .05]
HM70	RNC70 RNR70 RNN70	1.0W	.5W	.75W	.5W	350V	10Ω - 10M	.680 ± .062 [17.3 ± 1.57]	.250 ± .032 [6.35 ± 0.8]	.032 ± .002 [.8 ± .05]
HM75	RNC75 RNR75 RNN75	2.0W	1.0W	2.0W	1.0W	500V	10Ω - 10M	1.102 ± .062 [28 ± 1.57]	.395 ± .04 [10 ± 1]	.032 ± .002 [.8 ± .05]

¹ MIL type given for reference only and does not imply MIL qualification or exact interchangeability. ² Increased range available, consult factory

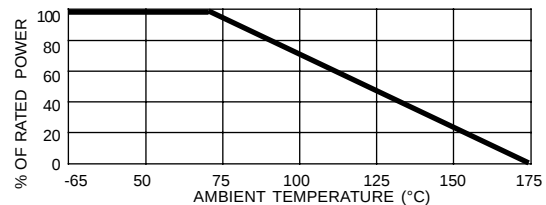
PERFORMANCE CHARACTERISTICS*

Condition	RCD Typ.	MIL-PRF-55182 Max.
TC (ppm/°C) **	5, 10, 15, 25, 50	25, 50ppm
Resistance Tolerance	.01%, .02%, .05%, .1%, .25%, .5%, 1%	.1%, .5%, 1%
Operating Temp. Range	-65° to +175°C	-65° to +175°C
Moisture Resistance	.03%	.2%
2000 Hour Load Life*	.1%	.5%
Thermal Shock/Overload	.02%	.2%
Low Temp. Operation	.05%	.15%
Terminal Strength	.02%	.2%
Dielectric Withstanding	.02%	.15%
Resis. to Solder Heat	.02%	.1%
Shock	.03%	.2%
Vibration	.02%	.2%
High Temp. Exposure	.2%	.5%

* Tested in accordance with MIL-PRF-55182 at applicable MIL power ratings.

** TC is measured +25 to +85°C, expanded range available

DERATING



P/N DESIGNATION: **HM55** ☐ - **1001** - **F** **T** **10** **W**

RCD Type

Options: EK, EL (leave blank for std)

Resis. Code: 3 signif. figures & multiplier, e.g. 1R00=1Ω, 10R0=10Ω, 1000=100Ω, 1001=1KΩ, etc.

Tolerance Code: F=1%, D=0.5%, C=0.25%, B=0.1%, A=0.05%, Q=0.02%, T=0.01%

Packaging: B = Bulk, T = Tape & Reel

Temp. Coef: 5=5ppm, 10=10ppm, 15=15ppm, 25=25ppm, 50=50ppm

Termination: W= Lead-free, Q= Tin/Lead (leave blank if either is acceptable)