

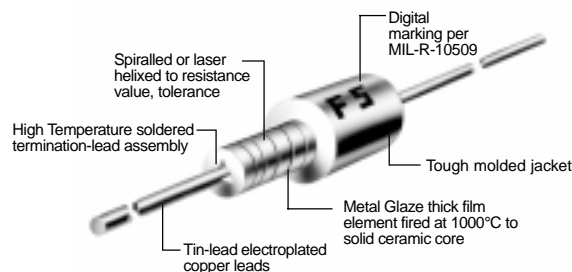
PRECISION MIL-QUALIFIED METAL GLAZE™ RESISTOR

ISO-9001
Registered



RN SERIES

- 1/8 watt to 1/2 watt
- 10 ohms to 1M ohms
- 0.1% to 1% tolerance
- MIL-R-10509 ± 25 ppm/°C to ± 100



SPECIFICATIONS:

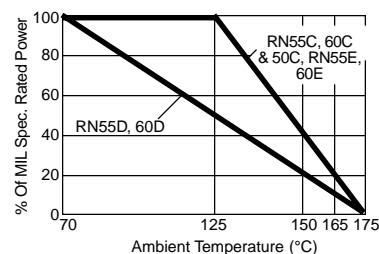
MIL Type	Marking	Tolerance (±%)	T.C. (ppm/°C)	MIL Power Rating (watts)	MIL Resistance Range (ohms)	Nominal Size	Max Voltage Rating
RN50C*	Stamp	1	50	1/20 @ 125°C	10 to 100K	1/8W	200
RN55D	Stamp	1	100	1/8 @ 70°C	10 to 301K	1/4W	200
RN55C	Stamp	0.1, 0.5, 1	50	1/10 @ 125°C	49.9 to 100K	1/4W	200
RN55E	Stamp	0.1, 0.5, 1	25	1/10 @ 125°C	49.9 to 100K	1/4W	200
RN60D	Stamp	1	100	1/4 @ 70°C	10 to 1M	1/2W	300
RN60C	Stamp	0.1, 0.5, 1	50	1/8 @ 125°C	49.9 to 499K	1/2W	250
RN60E	Stamp	0.1, 0.5, 1	25	1/8 @ 125°C	49.9 to 499K	1/2W	250

Note: *Conformal coating construction on 1/8 nominal size resistors.

RN55 PERFORMANCE:

Test Conditions	MIL-R-10509 Test Limits Allowed		RN55 Max. %ΔR(±3σ)	
	RN55 (D)	RN55 (C)	T0-55	T2-55
Temperature Coefficient ppm/°C	+200/-500	±50	±100	±50
Low Temperature Operation	±0.50%	±0.25%	±0.10%	±0.10%
Temperature Cycling	±0.50%	±0.25%	±0.10%	±0.10%
Moisture Resistance	±1.50%	±0.50%	±0.50%	±0.50%
Short Time Overload	±0.50%	±0.25%	±0.10%	±0.10%
Load Life (70°C-1/2W, 125°C-1/100W) 1000 hrs.	±1.00%	±0.50%	±0.30%	±0.20%
Terminal Strength	±0.20%	±0.20%	±0.05%	±0.05%
Effect of Soldering	±0.50%	±0.10%	±0.10%	±0.10%
Shock	±0.50%	±0.25%	±0.05%	±0.05%
Vibration	±0.50%	±0.25%	±0.05%	±0.05%
High Temperature Exposure (150°C No Load)	N/A	N/A	±0.50%	±0.50%
2X Rated Power for 10,000 hrs. at 70°C	N/A	N/A	±0.50%	±0.50%
Temperature Rise at 1/4W Power Load	-	-	See Temp. Rise Chart	
Dielectric Strength	±0.50%	±0.25%	±0.05%	±0.05%

MIL SPEC POWER DERATING:



HOW TO ORDER:

Sample Part No.:

RN - 55 - D - 1002 - F

MIL Style

RL=Fixed film resistor
High stability

Power Rating

50=1/20 watt
55=1/10 watt
60=1/8 watt

T.C. Characteristics

D=±100 ppm/°C
C=±50 ppm/°C
E=±25 ppm/°C

Resistance

First three digits represent significant figures; fourth digit is number of zeros.

Tolerance

F=±1%, D=±0.5%, B=±0.1%

DIMENSIONS (Inches and (mm)):

Nominal Size	Body Length BL	Body Diameter BD	Lead Length LL	Lead Diameter LD	Clean Lead
1/8 watt	0.150±0.020 (3.8±0.5)	0.066±0.008 (1.7±0.2)	1.00±0.125 (25.4±3.2)	0.016±0.002 (0.41±0.05)	0.225 (5.7)
1/4 watt	0.250±0.015 (6.4±.4)	0.090±0.008 (2.3±.2)	1.50±.125 (38.1±3.2)	0.025±.002 (0.64±0.05)	0.310 (7.9)
1/2 watt	0.390±.010 (9.9±.3)	0.140±.008 (3.6±.2)	1.50±.125 (38.1±3.2)	0.025±.002 (0.64±0.05)	0.450 (11.4)

WIREWOUND AND FILM TECHNOLOGIES DIVISION

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