ESTABLISHED RELIABILITY MIL-QUALIFIED METAL GLAZE™ RESISTOR



RNC SERIES

- 1/20 watt to 1/8 watt
- 10 ohms to 2M ohms
- 0.1%, 0.5%, and 1% tolerance •
- ±25 ppm/°C to ±100 ppm/°C •
- MIL-R-55182 approved to S level •

Digital marking per MIL-R-55182 Spiraled or laser — helixed to resistance value, tolerance High Temperature soldered termination-lead assembly Tough molded jacket Metal Glaze thick film element fired at 1000°C to solid ceramic core Tin-lead electroplated copper leads

ISO-9001 Registered

SPECIFICATIONS:

MIL Type	Marking	Tolerance (±%)	T.C. (ppm/°C)	MIL Power Rating (watts)	MIL Resistance Range (ohms)	Nominal Size	Voltage Rating
RNC50H/S ¹	Stamp	1	50	1/20 @ 125°C	10 to 301K	1/8W	200
RNC50J/S1	Stamp	1	25	1/20 @ 125°C	10 to 301K	1/8W	200
RNC50K/S1	Stamp	1	100	1/20 @ 125°C	10 to 301K	1/8W	200
RNC55H/S	Stamp	0.1, 0.5, 1 ²	50	1/10 @ 125°C	10 to 2M ²	1/4W	200
RNC55K/S	Stamp	0.5, 1 ²	100	1/10 @ 125°C	10 to 2M ²	1/4W	200
RNC55J/S	Stamp	0.1, 0.5, 1 ²	25	1/10 @ 125°C	10 to 2M ²	1/4W	200
RNC60H/S	Stamp	0.1, 0.5, 1	50	1/8 @ 125°C	10 to 100K	1/2W	250
RNC60K/S	Stamp	0.5, 1	100	1/8 @ 125°C	10 to 100K	1/2W	250
RNC60J/S	Stamp	0.1, 0.5, 1	25	1/8 @ 125°C	10 to 100K	1/2W	250

NOTE: 1- Conformally coated construction on all 1/8W nominal sizes. 2- Only available in F tolerance above 1M ohm.

Environmental Conditions	Maximum Change Per MIL-R-55182	Typical IRC Performance
Thermal Shock	±0.20%	±0.02%
Overload	±0.20%	±0.05%
Low Temperature Operation	±0.15%	±0.03%
Terminal Strength	±0.20%	±0.02%
Dielectric Withstanding Voltage	±0.15%	±0.05%
Resistance to Soldering Heat	±0.10%	±0.02%
Moisture Resistance	±0.40%	±0.15%
Shock, Medium Impact	±0.20%	±0.05%
Vibration, High Frequency	±0.20%	±0.02%
2.000 - Hour Life	±0.50%	±0.10%
10,000 - Hour Life	±2.00%	±0.30%
High Temperature Exposure	±0.50%	±0.10%

ESTABLISHED RELIABILITY MIL SPECIFICATIONS: RNC products listed above are qualified to the appropriate established reliability MIL Specification. In general, Metal Glaze™ units such as these are specified for all RNC requirements.

HOW TO ORDER: Sample Part No.:

<u>RNC-55 H 7500 F</u>	ş
MIL Style RNC = Solderable/ weldable leads	
Power Rating 50= 1/20 watt 55= 1/10 watt 60= 1/8 watt	
T.C. Characteristics K= ±100 ppm/°C H= ±50 ppm/°C J= ±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%

Failure Rate -

S = 0.001% for 1000 hrs. (60% confidence)

DIMENSIONS (Inches and (mm)):

Nominal	Body	Body	Lead	Lead	Clean Lead			
Size	Length BL	Diameter BD	Length LL	Diameter LD				
1/8 watt	0.150±0.020	0.066±0.008	1.00±0.125	0.016±0.002	0.187			
	(3.8±0.5)	(1.7±0.2)	(25.4±3.2)	(0.41±0.05)	(4.7)			
1/4 watt	0.250±.015	0.090±.008	1.50±.125	0.025±.002	0.300			
	(6.4±.4)	(2.3±.2)	(38.1±3.2)	(0.64±0.05)	(7.6)			
1/2 watt	0.390±.010	0.140±.008	1.50±.125	0.025±.002	0.450			
	(9.9±.3)	(3.6±.2)	(38.1±3.2)	(0.64±0.05)	(11.4)			