

- Features:
- Precision metal film
  - Superior electrical, TCR performances
  - Flame-retardant coatings are standard
  - Panasert available (selected sizes: contact factory)
  - RNM (mini) an ideal choice where size constraints apply
  - RN 5% replaces MP series
  - RoHS compliant / lead-free available (RNF/RNMF)
  - Lower or higher resistance values may be possible (contact factory)

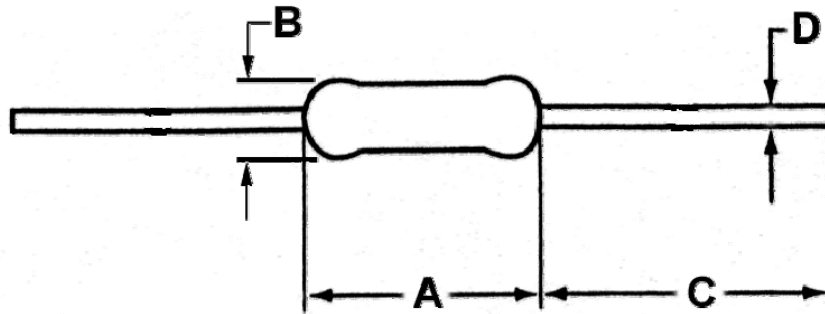


Electrical Specifications											
Type / Code	Mil Ref	Power Rating (Watts) @ 70°C	Maximum Working Voltage <sup>①</sup>	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance					
						0.1%	0.25%	0.5%	1%	2%	5%
RN 1/8	RN 50	0.125W	200V	400V	±25 ppm/°C	100Ω - 100K	100Ω - 100K	49.9Ω - 499K	49.9Ω - 499K	-	-
					±50 ppm/°C	100Ω - 100K	100Ω - 100K	10Ω - 499K	10Ω - 1M	-	-
					±100 ppm/°C	100Ω - 100K	100Ω - 100K	10Ω - 511K	1Ω - 22M	1Ω - 22M	1Ω - 22M
RN 1/4	RN 55	0.250W	250V	500V	±10 ppm/°C	100Ω - 100K	-	-	-	-	-
					±25 ppm/°C	10Ω - 2.2M	10Ω - 2.2M	10Ω - 2.2M	10Ω - 1M	-	-
					±50 ppm/°C	10Ω - 2.2M	10Ω - 2.2M	10Ω - 2.2M	10Ω - 1M	-	-
					±100 ppm/°C	10Ω - 2.2M	10Ω - 2.2M	10Ω - 2.2M	10Ω - 1M	1Ω - 10M	1Ω - 10M
RN 1/2	RN 60	0.500W	350V	700V	±25 ppm/°C	100Ω - 100K	100Ω - 100K	49.9Ω - 499K	49.9Ω - 499K	-	-
					±50 ppm/°C	100Ω - 100K	100Ω - 100K	10Ω - 511M	10Ω - 1M	-	-
					±100 ppm/°C	100Ω - 100K	100Ω - 100K	10Ω - 511M	1Ω - 5.1M	1Ω - 10M	1Ω - 10M
RN 1	RN 65	1.000W	350V	700V	±25 ppm/°C	-	-	10Ω - 511K	10Ω - 1M	-	-
					±50 ppm/°C	-	-	10Ω - 511K	10Ω - 1M	-	-
					±100 ppm/°C	-	-	10Ω - 511K	10Ω - 1M	-	-
RN 2	-	2.000W	350V	800V	±25 ppm/°C	-	-	10Ω - 511K	10Ω - 1M	-	-
					±50 ppm/°C	-	-	10Ω - 511K	10Ω - 1M	-	-
					±100 ppm/°C	-	-	10Ω - 511K	10Ω - 1M	-	10Ω - 1M
RNM 1/4	-	0.250W	200V	400V	±25 ppm/°C	100Ω - 100K	100Ω - 100K	49.9Ω - 499K	49.9Ω - 499K	-	-
					±50 ppm/°C	100Ω - 100K	100Ω - 100K	10Ω - 511K	10Ω - 1M	-	-
					±100 ppm/°C	100Ω - 100K	100Ω - 100K	10Ω - 511K	10Ω - 1M	1Ω - 1M	1Ω - 1M
RNM 1/2	RL 07	0.500W	350V	600V	±25 ppm/°C	100Ω - 100K	100Ω - 100K	49.9Ω - 499K	49.9Ω - 499K	-	-
					±50 ppm/°C	49.9Ω - 1M	49.9Ω - 1M	10Ω - 1M	1Ω - 1M	-	-
					±100 ppm/°C	49.9Ω - 1M	49.9Ω - 1M	10Ω - 1M	1Ω - 1M	1Ω - 1M	1Ω - 1M

① Lesser of  $\sqrt{PR}$  or maximum working voltage.

## How to Order

SEI Type		Code	TCR		Nominal Resistance	Tolerance		Packaging			
RN		1/4	T1		4.75K	1%		R			
Type	Description	Code	TCR		Tolerance Values		SEI Types		Pkg Qty	Code	Description
RN	EIA standard	1/8	T1	100ppm	0.1%	E96	1/8, 1/4, RNM 1/2	5,000	R	Reel	
RNM	Mini	1/4	T2	50ppm	0.25%	E96	1/2, 1	2,500			
RNF	Standard RoHS	1/2	T9	25ppm	0.5%	E96	1/8, RNM 1/2	5,000	T	Ammo	
RNMF	Mini RoHS	1	TB	10ppm	1%	E96, E24	1/4	2,500			
PRN	Panasert	2			5%	E24	1/2	2,000			
PRNF	Pana - RoHS						1	1,000	A	Bulk	
							1/8, 1/4, 1/2	1,000			
							2	1,000			



Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Units
RN 1/8	0.13 ± 0.012 3.3 ± 0.3	0.070 ± 0.012 1.8 ± 0.3	1.10 ± 0.12 28 ± 3	0.018 ± 0.003 0.45 ± 0.07	inches mm
RN 1/4	0.25 ± 0.026 6.35 ± 0.65	0.093 ± 0.010 2.35 ± 0.25	1.10 ± 0.12 28 ± 3	0.022 ± 0.003 0.56 ± 0.08	inches mm
RN 1/2	0.34 ± 0.030 8.75 ± 0.75	0.108 ± 0.039 2.75 ± 1.0	1.10 ± 0.197 28 ± 5	0.26 ± 0.004 0.65 ± 0.1	inches mm
RN 1	0.433 ± 0.04 11 ± 1	0.177 ± 0.02 4.50 ± 0.5	1.18 ± 0.12 30 ± 3	0.030 ± 0.002 0.75 ± 0.05	inches mm
RN 2	0.59 x 0.04 15 x 1	0.2 x 0.02 5 x 0.5	1.18 ± 0.12 30 ± 3	0.027 x 0.004 0.7 x 0.1	inches mm
RNM 1/4	0.13 ± 0.011 3.3 ± 0.3	0.070 ± 0.003 1.78 ± 0.08	1.10 ± 0.12 28 ± 3	0.017 ± 0.002 0.44 ± 0.05	inches mm
RNM 1/2	0.25 ± 0.026 6.35 ± 0.65	0.093 ± 0.010 2.35 ± 0.25	1.10 ± 0.12 28 ± 3	0.022 ± 0.003 0.56 ± 0.08	inches mm

Performance Characteristics		
Test	Standard / Method	Requirement
Biased Humidity	MIL-STD 202, Method 103	± 1.5%
Resistance to Solder Heat	MIL-STD 202, Method 210	± 0.5%
Insulation Resistance	JIS C 5202 5.6	± 0.5%
Load Life	MIL-STD 202, Method 208	± 1%
Terminal Strength	MIL-STD 202, Method 211	± 0.2%
Temperature Cycling	JESD22 Method JA-104	± 1%
Moisture Resistance	MIL-STD 202, Method 106	± 0.5%

Operating Temperature Range: -55°C to +155°C