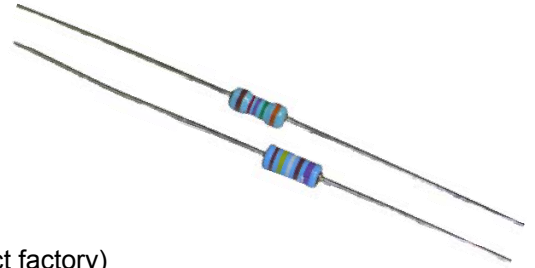
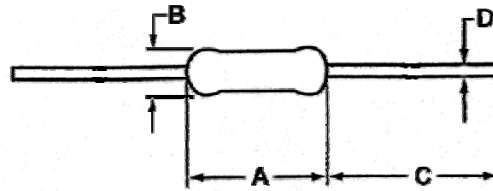


- Features:
- Precision metal film
  - Superior electrical, TCR performances
  - Flame-retardant coatings are standard
  - Panasert available (selected sizes: contact factory)
  - RNMF (mini) an ideal choice where size constraints apply
  - RNS (ultra-mini) for tight size constraints
  - RNF 5% replaces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



Electrical Specifications											
Type / Code	Mil Ref	Power Rating (Watts) @ 70°C	Maximum Working Voltage (Vrms) (1)	Maximum Overload Voltage (Vrms)	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance					
						0.1%	0.25%	0.5%	1%	2%	5%
RNF 1/8	RN 50	0.125W	200V	400V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	100 - 100K	100 - 100K	49.9 - 499K 10 - 499K 10 - 511K	49.9 - 499K 10 - 1M 1 - 22M	- - 1 - 22M	- - 1 - 22M
RNF 1/4	RN 55	0.25W	250V	500V	±10 ppm/°C ±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	100 - 100K 10 - 2.2M 10 - 2.2M 10 - 2.2M	- 10 - 2.2M 10 - 2.2M 10 - 2.2M	- 10 - 2.2M 10 - 2.2M 10 - 2.2M	- 10 - 1M 10 - 1M 10 - 1M	- - - 1 - 10M	- - - 1 - 10M
RNF 1/2	RN 60	0.5W	350V	700V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	100 - 100K	100 - 100K	49.9 - 499K 10 - 511K 10 - 511K	49.9 - 499K 10 - 1M 1 - 5.1M	- - 1 - 10M	- - 1 - 10M
RNF 1	RN 65	1W	350V	700V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	- - -	- - -	10 - 511K	10 - 1M	- - -	- - -
RNF 2	-	2W	350V	800V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	- - -	- - -	10 - 511K	10 - 1M	- - -	- - 10 - 1M
RNMF 1/4	-	0.25W	200V	400V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	100 - 100K	100 - 100K	49.9 - 499K 10 - 511K 10 - 511K	49.9 - 499K 10 - 1M 10 - 1M	- - 1 - 1M	- - 1 - 1M
RNMF 1/2	RL 07	0.53	350V	600V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	100 - 100K 49.9 - 1M 49.9 - 1M	100 - 100K 49.9 - 1M 49.9 - 1M	49.9 - 499K 10 - 1M 10 - 1M	49.9 - 499K 1 - 1M 1 - 1M	- - 1 - 1M	- - 1 - 1M
RNS 1/2	-	0.5W	200V	400V	±50 ppm/°C ±100 ppm/°C	- -	- -	10 - 1M	10 - 1M	- -	- -
RNS 1	-	1W	350V	600V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	- - -	- - -	100 - 511K	10 - 1M	- - -	- - -
RNS 2	-	2W	350V	700V	±25 ppm/°C ±50 ppm/°C ±100 ppm/°C	- - -	- - -	100 - 511K	10 - 1M	- - -	- - -

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



Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Units
RNF 1/8	0.13 ± 0.012	0.070 ± 0.012	1.10 ± 0.12	0.018 ± 0.003	inches
	3.30 ± 0.30	1.80 ± 0.30	28.00 ± 3.00	0.45 ± 0.07	mm
RNF 1/4	0.25 ± 0.026	0.093 ± 0.010	1.10 ± 0.12	0.022 ± 0.003	inches
	6.35 ± 0.65	2.35 ± 0.25	28.00 ± 3.00	0.56 ± 0.08	mm
RNF 1/2	0.34 ± 0.030	0.108 ± 0.039	1.10 ± 0.197	0.26 ± 0.004	inches
	8.75 ± 0.75	2.75 ± 1.00	28.00 ± 5.00	0.65 ± 0.10	mm
RNF 1	0.433 ± 0.04	0.177 ± 0.02	1.18 ± 0.12	0.030 ± 0.002	inches
	11.00 ± 1.00	4.50 ± 0.50	30.00 ± 3.00	0.75 ± 0.05	mm
RNF 2	0.59 ± 0.04	0.2 ± 0.02	1.18 ± 0.12	0.027 ± 0.004	inches
	15.00 ± 1.00	5.00 ± 0.50	30.00 ± 3.00	0.70 ± 0.10	mm
RNMF 1/4	0.13 ± 0.011	0.070 ± 0.003	1.10 ± 0.12	0.017 ± 0.002	inches
	3.30 ± 0.30	1.78 ± 0.08	28.00 ± 3.00	0.44 ± 0.05	mm
RNMF 1/2	0.25 ± 0.026	0.093 ± 0.010	1.10 ± 0.12	0.022 ± 0.003	inches
	6.35 ± 0.65	2.35 ± 0.25	28.00 ± 3.00	0.56 ± 0.08	mm
RNS 1/2	0.13 ± 0.01	0.07 ± 0.01	1.10 ± 0.08	0.017 ± 0.002	inches
	3.40 ± 0.40	1.80 ± 0.30	28.00 ± 2.00	0.43 ± 0.05	mm
RNS 1	0.26 ± 0.02	0.09 ± 0.006	1.10 ± 0.08	0.022 ± 0.002	inches
	6.50 ± 0.50	2.30 ± 0.20	28.00 ± 2.00	0.56 ± 0.05	mm
RNS 2	0.35 ± 0.02	0.14 ± 0.02	1.10 ± 0.08	0.31 ± 0.004	inches
	9.00 ± 0.50	3.50 ± 0.50	28.00 ± 2.00	0.80 ± 0.10	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

**How to Order**

SEI Type		Code	TCR	Nominal Resistance	Tolerance	Packaging				
RNF		1/4	T1	4.75K	1%		R			
Type	Description	Code	TCR	Tolerance		Values	SEI Types	Pkg Qty	Code	Description
RNF	Standard	1/8	T1	100ppm	0.1%	E96	1/8, 1/4, RNMF 1/2, RNS 1/2, RNS 1	5,000	R	tape and reel
RNMF	Mini	1/4	T2	50ppm	0.25%	E96	1/2, 1, RNS 2	2,500	T	ammo
RNS	Ultra-Mini	1/2	T9	25ppm	0.5%	E96	1/8, 1/4, RNMF 1/2, RNS 1, RNS 2	5,000		
PRN	Panasert	1	TB	10ppm	1%	E96, E24	1/2	2,000	A	bulk
PRNF	Pana - RoHS	2			5%	E24	1	1,000		
							1/8, 1/4, 1/2	1,000	R	tape and reel
							2	1,000	T	ammo
							2, RNS 1, RNS 2	1,000	A	bulk

New part number format starting January 3<sup>rd</sup>, 2011:

**How to Order**

