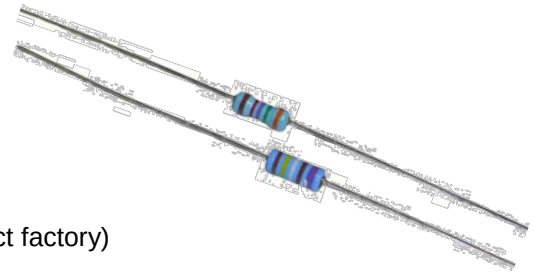
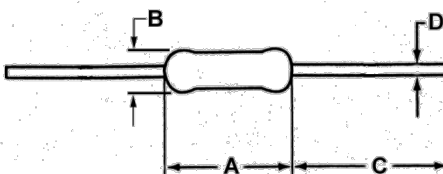


- Features:
- Precision metal film
 - Superior electrical, TCR performances
 - Flame-retardant coatings are standard
 - Panasert available (selected sizes: contact factory)
 - RNMF (mini) an ideal choice where size constraints apply
 - RNF 5% replaces MP series
 - RoHS compliant / lead-free
 - Lower 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						
						0.05%	0.1%	0.25%	0.5%	1%	2%	5%
RNF18	RN 50	0.125W	200V	400V	±10 ppm/°C	100 - 100K	100 - 100K	100 - 100K	100 - 100K	100 - 100K	-	-
					±25 ppm/°C	100 - 100K	100 - 100K	100 - 100K	30.1 - 499K	49.9 - 499K	-	-
					±50 ppm/°C	100 - 100K	100 - 100K	100 - 100K	10 - 1M	1 - 1M	-	-
					±100 ppm/°C	100 - 100K	51.1 - 100K	100 - 100K	10 - 1M	1 - 10M	1 - 22M	1 - 22M
RNF14	RN 55	0.25W	250V	500V	±10 ppm/°C	100 - 100K	100 - 100K	-	-	-	-	-
					±25 ppm/°C	100 - 100K	1 - 2.2M	1 - 2.2M	1 - 2.2M	10 - 1M	-	-
					±50 ppm/°C	100 - 100K	1 - 2.2M	1 - 2.2M	1 - 2.2M	1 - 5.11M	-	1.1M - 10M
					±100 ppm/°C	100 - 100K	1 - 2.2M	1 - 2.2M	1 - 2.2M	1 - 10M	5.6 - 10M	1 - 10M
RNF12	RN 60	0.5W	350V	700V	±25 ppm/°C	100 - 100K	100 - 100K	100 - 100K	49.9 - 499K	49.9 - 499K	-	-
					±50 ppm/°C	100 - 100K	100 - 100K	100 - 100K	10 - 1M	1 - 4.99M	-	-
					±100 ppm/°C	100 - 100K	100 - 100K	100 - 100K	10 - 1M	1 - 10M	1 - 10M	1 - 10M
RNF1	RN 65	1W	350V	700V	±25 ppm/°C	-	-	-	-	-	-	-
					±50 ppm/°C	-	-	-	10 - 1M	10 - 470K	-	-
					±100 ppm/°C	-	-	-	10 - 1M	1 - 1M	-	-
RNF2	-	2W	350V	800V	±25 ppm/°C	-	-	-	-	-	-	-
					±50 ppm/°C	-	-	-	-	10 - 1M	-	-
					±100 ppm/°C	-	-	-	-	10 - 1M	-	10 - 1M
RNMF14	-	0.25W	200V	400V	±25 ppm/°C	-	100 - 100K	100 - 100K	30.1 - 499K	30.1 - 499K	-	-
					±50 ppm/°C	-	100 - 100K	100 - 100K	10 - 1M	1 - 1M	-	-
					±100 ppm/°C	-	100 - 100K	100 - 100K	10 - 1M	1 - 2.15M	1 - 2.2M	1 - 2.2M
RNMF12	RL 07	0.5W	350V	600V	±25 ppm/°C	-	30.1 - 294K	30.1 - 294K	49.9 - 1M	49.9 - 1M	-	-
					±50 ppm/°C	-	30.1 - 1M	30.1 - 1M	10 - 1M	1 - 1M	-	-
					±100 ppm/°C	-	30.1 - 1M	30.1 - 1M	10 - 1M	1 - 10M	1 - 10M	1 - 10M

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

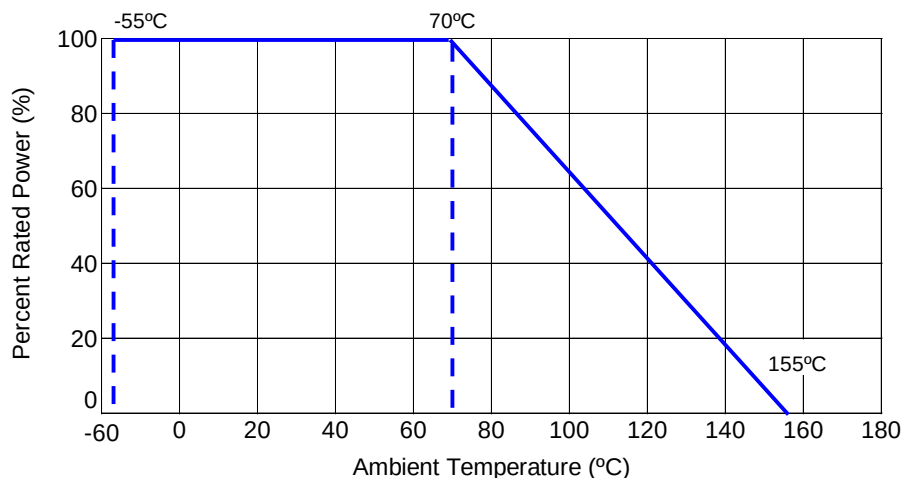


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
RNF18	0.130 ± 0.012	0.071 ± 0.012	1.102 ± 0.118	0.018 ± 0.003	inches
	3.30 ± 0.30	1.80 ± 0.30	28.00 ± 3.00	0.45 ± 0.07	mm
RNF14	0.250 ± 0.026	0.093 ± 0.010	1.102 ± 0.118	0.022 ± 0.003	inches
	6.35 ± 0.65	2.35 ± 0.25	28.00 ± 3.00	0.56 ± 0.08	mm
RNF12	0.344 ± 0.030	0.108 ± 0.039	1.102 ± 0.197	0.026 ± 0.004	inches
	8.75 ± 0.75	2.75 ± 1.00	28.00 ± 5.00	0.65 ± 0.10	mm
RNF1	0.433 ± 0.039	0.177 ± 0.020	1.181 ± 0.118	0.030 ± 0.002	inches
	11.00 ± 1.00	4.50 ± 0.50	30.00 ± 3.00	0.75 ± 0.05	mm
RNF2	0.591 ± 0.039	0.197 ± 0.020	1.339 ± 0.157	0.028 ± 0.004	inches
	15.00 ± 1.00	5.00 ± 0.50	34.00 ± 4.00	0.70 ± 0.10	mm
RNMF14	0.130 ± 0.012	0.070 ± 0.003	1.102 ± 0.118	0.017 ± 0.002	inches
	3.30 ± 0.30	1.78 ± 0.08	28.00 ± 3.00	0.44 ± 0.05	mm
RNMF12	0.250 ± 0.026	0.093 ± 0.010	1.102 ± 0.118	0.022 ± 0.003	inches
	6.35 ± 0.65	2.35 ± 0.25	28.00 ± 3.00	0.56 ± 0.08	mm

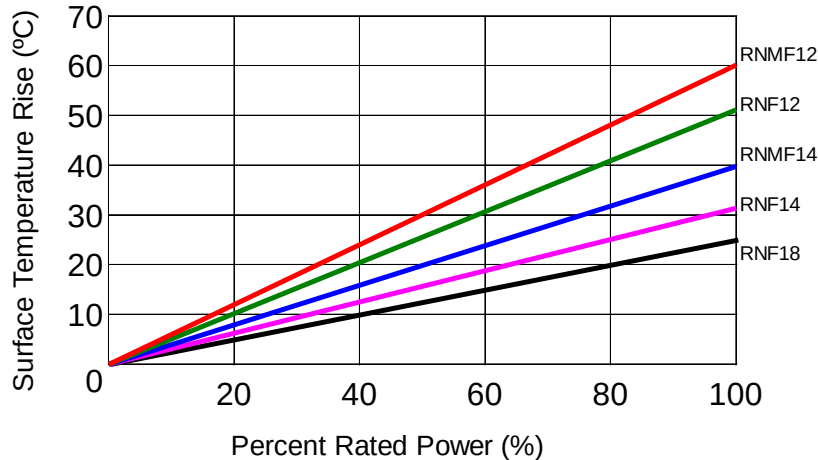
Performance Characteristics		
Test	Standard / Method	Requirement
Biased Humidity	MIL-STD 202, Method 103	± 1.5%
Resistance to Solder Heat	MIL-STD 202, Method 210	± 0.5%
Insulation Resistance	JIS C 5202 5.6	± 0.5%
Load Life	MIL-STD 202, Method 108	± 1%
Terminal Strength	MIL-STD 202, Method 211	± 0.2%
Temperature Cycling	JESD22 Method JA-104	± 1%
Moisture Resistance	MIL-STD 202, Method 106	± 0.5%

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

Power Derating Curve:



Surface Temperature Rise:



How to Order

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Product Series		Size	Power	Tolerance			Packaging				TCR		Resistance Value	
RNF	Standard	18	0.125W	Code	Tol	Value	Code	Description	Size	Quantity	Code	ppm	Four characters with the multiplier used as the decimal holder. 10 ohm = 10R0 10.2 Kohm = 10K2 1 Mohm = 1M00	
RNMF	Mini	14	0.25W	A	0.05%	E96, E24	T	Tape and Reel	RNF18, RNF14 RNMF14, RNMF12	5,000	T	10		
PRNF	Panaset RoHS	12	0.5W	B	0.1%				RNF12, RNF1	2,500	E	25		
		1	1W	C	0.25%				RNF2	1,000	C	50		
		2	2W	D	0.5%		A	Ammo	RNF18, RNF14 RNMF14, RNMF12	5,000 (*)	D	100		
				F	1%	E24								
				G	2%									
				J	5%									
							B	Bulk	RNF18, RNF14, RNF12, RNF2 RNMF12, RNMF14	1,000				

(*) Precision metal film resistors with tolerances <1% may be available in smaller quantities. Contact factory for more details.

Legacy Part Number (before January 3, 2011):

SEI Type		Code	TCR		Nominal Resistance	Tolerance		Packaging					
RNF		1/4	T1		4.75K	1%		R					
Type	Description	Code	TCR				Tol	Values	SEI Types		Pkg Qty	Code	Description
RNF	Standard	1/8	T1	100ppm			0.05%	E96, E24	RNF18, RNF14, RNMF14, RNMF12		5,000	R	Tape and Reel
RNMF	Mini	1/4	T2	50ppm			0.1%		RNF12, RNF1		2,500		
PRN	Panasert	1/2	T9	25ppm			0.25%		RNF2		1,000		
PRNF	Pana - RoHS	1	TB	10ppm			0.5%		RNF18, RNF14, RNFM14, RNMF12		5,000 (*)	T	Ammo
		2							1%	RNF12			
							5%	E24	RNF1, RNF2		1,000	A	Bulk
									RNF18, RNF14, RNF12, RNF2, RNF1, RNMF14, RNMF12		1,000		

(*) Precision metal film resistors with tolerances <1% may be available in smaller quantities. Contact factory for more details.