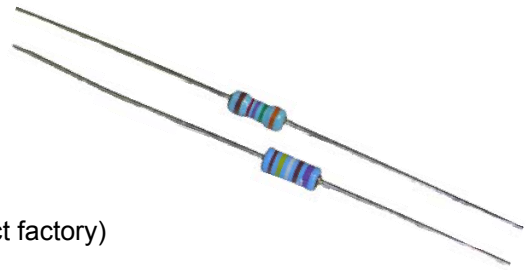
Features:

- 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)

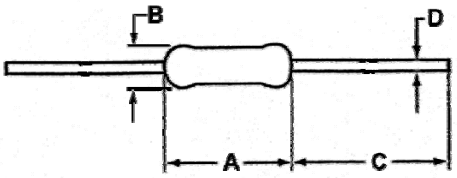


Electrical Specifications

Type / Code	Mil Ref	Power Rating (Watts) @ 70ºC	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/ºC	100 - 100K	100 - 100K	100 - 100K	100 - 100K	100 - 100K	-	-
					±25 ppm/ºC	100 - 100K	100 - 100K	100 - 100K	30.1 - 499K	49.9 - 499K	-	-
					±50 ppm/ºC	100 - 100K	100 - 100K	100 - 100K	10 - 1M	1 - 1M	-	-
					±100 ppm/ºC	100 - 100K	51.1 - 100K	100 - 100K	10 - 1M	1 - 10M	1 - 22M	1 - 22M
RNF14	RN 55	0.25W	250V	500V	±10 ppm/ºC	100 - 100K	100 - 100K	-	-	-	-	-
					±25 ppm/ºC	100 - 100K	1 - 2.2M	1 - 2.2M	1 - 2.2M	10 - 1M	-	-
					±50 ppm/ºC	100 - 100K	1 - 2.2M	1 - 2.2M	1 - 2.2M	1 - 5.11M	-	1.1M - 10M
					±100 ppm/ºC	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/ºC	100 - 100K	100 - 300K	100 - 100K	49.9 - 499K	49.9 - 499K	-	-
					±50 ppm/ºC	100 - 100K	100 - 100K	100 - 100K	10 - 1M	1 - 4.99M	-	-
					±100 ppm/ºC	100 - 100K	100 - 100K	100 - 100K	10 - 1M	1 - 10M	1 - 10M	1 - 10M
RNF1	RN 65	1W	350V	700V	±25 ppm/ºC	-	-	-	-	-	-	-
					±50 ppm/ºC	-	-	-	10 - 1M	10 - 470K	-	-
					±100 ppm/ºC	-	-	-	10 - 1M	1 - 1M	-	-
RNF2	-	2W	350V	800V	±25 ppm/ºC	-	-	-	-	-	-	-
					±50 ppm/ºC	-	-	-	-	10 - 1M	-	-
					±100 ppm/ºC	-	-	-	-	10 - 1M	-	10 - 1M
RNMF14	-	0.25W	200V	400V	±25 ppm/ºC	-	100 - 100K	100 - 100K	30.1 - 499K	30.1 - 499K	-	-
					±50 ppm/ºC	-	100 - 100K	100 - 100K	10 - 1M	1 - 1M	-	-
					±100 ppm/ºC	-	100 - 100K	100 - 100K	10 - 1M	1 - 2.15M	1 - 2.2M	1 - 2.2M
RNMF12	RL 07	0.5W	350V	600V	±25 ppm/ºC	-	30.1 - 294K	30.1 - 294K	49.9 - 1M	49.9 - 1M	-	-
					±50 ppm/ºC	-	30.1 - 1M	30.1 - 1M	10 - 1M	1 - 1M	-	-
					±100 ppm/ºC	-	30.1 - 1M	30.1 - 1M	10 - 1M	1 - 10M	1 - 10M	1 - 10M

(1) Lesser of √PR or maximum working voltage

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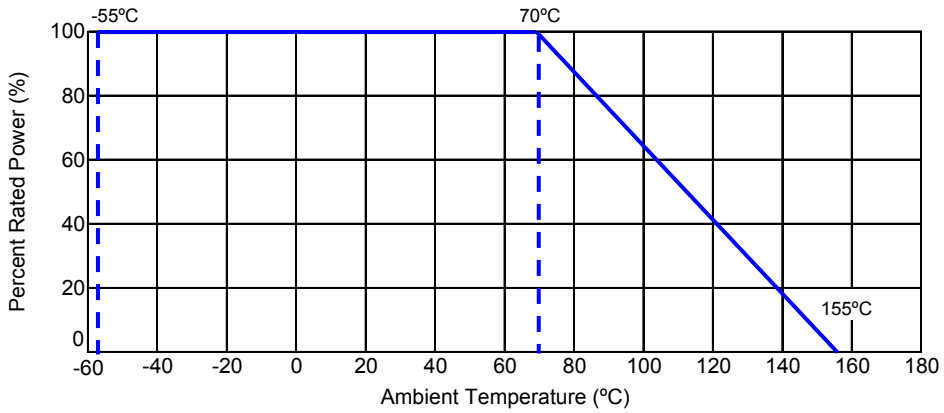


Mechanical Specifications					
Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Unit
RNF18	0.130 ± 0.012 3.30 ± 0.30	0.071 ± 0.012 1.80 ± 0.30	1.102 ± 0.118 28.00 ± 3.00	0.018 ± 0.003 0.45 ± 0.07	inches mm
RNF14	0.250 ± 0.026 6.35 ± 0.65	0.093 ± 0.010 2.35 ± 0.25	1.102 ±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

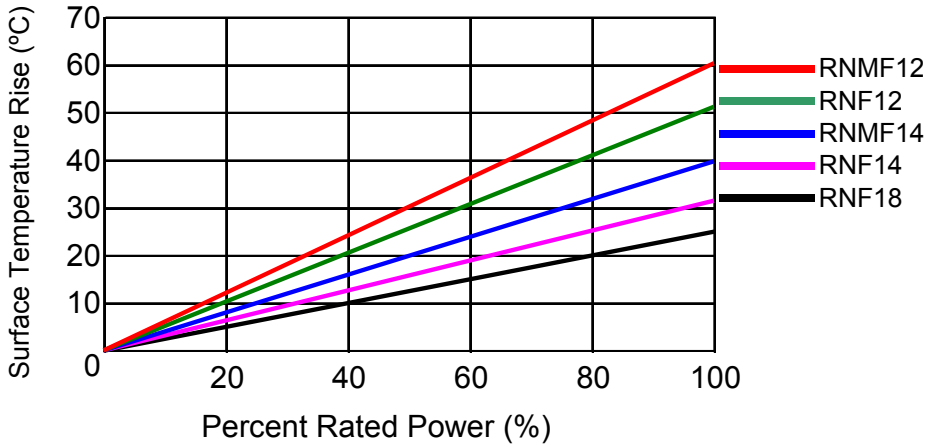
Operating Temperature Range: -55ºC to +155ºC

Power Derating Curve:



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Surface Temperature Rise:



How to Order

1	2	3	4	5	6	7	8	9	10	11	12
R	N	F	1	4	F	T	D	4	K	7	5

Product Series	
RNF	Standard
RNMF	Mini
PRNF	Panasert RoHS

Size	Power
18	0.125W
14	0.25W
12	0.5W
1	1W
2	2W

Tolerance		
Code	Tol	Value
A	0.05%	E96, E24
B	0.1%	
C	0.25%	
D	0.5%	
F	1%	
G	2%	E24
J	5%	

Packaging			
Code	Description	Size	Quantity
T	Tape and Reel	RNF18, RNF14 RNMF14, RNMF12	5,000
		RNF12, RNF1	2,500
		RNF2	1,000
A	Ammo	RNF18, RNF14 RNMF14, RNMF12	5,000 (*)
		RNF12	2,000
		RNF1, RNF2	1,000
B	Bulk	RNF18, RNF14, RNF12, RNF2 RNMF12, RNMF14	1,000

TCR	
Code	ppm
T	10
E	25
C	50
D	100

Resistance Value
Four characters with the multiplier used as the decimal holder.
10 ohm = 10R0 10.2 Kohm = 10K2 1 Mohm = 1M00

(*) 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
RNF	Standard
RNMF	Mini
PRN	Panasert
PRNF	Pana - RoHS

Code
1/8
1/4
1/2
1
2

TCR	
T1	100ppm
T2	50ppm
T9	25ppm
TB	10ppm

Tol	Values
0.05%	E96, E24
0.1%	
0.25%	
0.5%	
1%	
5%	E24

SEI Types	Pkg Qty	Code	Description
RNF18, RNF14, RNMF14, RNMF12	5,000	R	Tape and Reel
RNF12, RNF1	2,500		
RNF2	1,000		
RNF18, RNF14, RNFM14, RNMF12	5,000 (*)	T	Ammo
RNF12	2,000		
RNF1, RNF2	1,000		
RNF18, RNF14, RNF12, RNF2, RNF1, RNMF14, RNMF12	1,000	A	Bulk

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

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