

RN Series — General Purpose Metal Film Resistors

Features

- Precision metal film
- Pana-Sert available (selected sizes, contact factory)
- Flame-retardant coatings are standard
- Superior electrical, TCR performance
- RNM (mini) an ideal choice where size constraints apply
- RoHS compliant/ lead-free available (RNF/RNMF)



Electrical Specifications

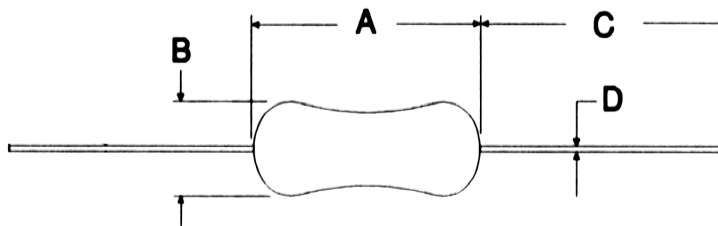
Type/Code	Power Rating (Watts) @ 70°C	Max Working Voltage*	Max Pulse Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance				
					0.1%	0.25%	0.5%	1%	5%
RN 1/8	0.125W	200	400	±100 ppm/°C ±50 ppm/°C ±25 ppm/°C	100Ω – 100K 100Ω – 100K 100Ω – 100K	100Ω – 100K 100Ω – 100K 100Ω – 100K	10Ω – 1M 10Ω – 1M 30.1Ω – 499K	10Ω – 2.37M 10Ω – 1M 49.9Ω – 499K	1Ω – 2.2M – –
RN 1/4	0.25W	250	500	±100 ppm/°C ±50 ppm/°C ±25 ppm/°C	30.1Ω – 1M 30.1Ω – 1M 30.1Ω – 1M	30.1Ω – 1M 30.1Ω – 1M 30.1Ω – 1M	10Ω – 1M 10Ω – 1M 30.1Ω – 1M	1Ω – 10M 1Ω – 5.11M 30.1Ω – 1M	1Ω – 10M – –
RN 1/2	0.5W	350	700	±100 ppm/°C ±50 ppm/°C ±25 ppm/°C	100Ω – 100K 100Ω – 100K 100Ω – 100K	100Ω – 100K 100Ω – 100K 100Ω – 100K	10Ω – 1M 10Ω – 1M 49.9Ω – 499K	1Ω – 10M 1Ω – 4.99M 49.9Ω – 499K	1Ω – 10M – –
RN 1	1W	350	700	±100 ppm/°C ±50 ppm/°C	–	–	– 10Ω – 100K	10Ω – 1M 10Ω – 1M	–
RNM 1/4	0.25W	250	500	±100 ppm/°C ±50 ppm/°C ±25 ppm/°C	100Ω – 100K 100Ω – 100K 100Ω – 100K	100Ω – 100K 100Ω – 100K 100Ω – 100K	10Ω – 1M 10Ω – 1M 30.1Ω – 499K	10Ω – 4.99M 10Ω – 1M 30.1Ω – 499K	10Ω – 2M – –
RNM 1/2	0.5W	350	700	±100 ppm/°C ±50 ppm/°C ±25 ppm/°C	30.1Ω – 1M 30.1Ω – 1M 100Ω – 294K	30.1Ω – 1M 30.1Ω – 1M 100Ω – 294K	10Ω – 1M 10Ω – 1M 49.9Ω – 1M	10Ω – 10M 1Ω – 2.15M 49.9Ω – 1M	10Ω – 2M – –

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

How to Order

RN		1/4	T1	4.75K	1%	R			
SEI Type		Code	TCR	Nominal Resistance	Tolerance	Packaging			
Type	Description	Code	TCR	Tolerance	Values	Code	Description	Series	Pkg Qty
RN	EIA std	1/8	T1 = 100ppm	0.1%	E96	R	Tape	RN 1/8, RN 1/4	5,000
RNM	Mini	1/4	T2 = 50ppm	0.25%	E96	R	Tape	RNM 1/4, RNM 1/2	5,000
RNF	Std RoHS	1/2	T9 = 25ppm	0.5%	E96	R	Tape	RN 1/2, RN 1	2,500
RNMF	Mini RoHS	1		1%	E96,E24	T	Ammo	All	5,000
				5%	E24	A	Bulk	All	1,000

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Mechanical Specifications

Type / Code	A Body Length	B Body Diameter	C Lead Length (Bulk)	D Lead Diameter	Units
RN 1/8	0.13 ± 0.01/-0	0.073 ± 0.006	1.10 ± 0.08	0.018 ± 0.002	inches
	3.2 ± 0.2/-0	1.85 ± 0.20	28.0 ± 2.0	0.45 ± 0.05	mm
RN 1/4	0.24 ± 0.01	0.09 ± 0.01	1.10 ± 0.08	0.023 ± 0.002	inches
	6.0 ± 0.3	2.4 ± 0.2	28.0 ± 2.0	0.60 ± 0.05	mm
RN 1/2	0.33 ± 0.02	0.11 ± 0.01	1.10 ± 0.08	0.027 ± 0.002	inches
	8.5 ± 0.5	2.8 ± 0.3	28.0 ± 2.0	0.70 ± 0.05	mm
RNM 1/4	0.13 ± 0.01/-0	0.073 ± 0.006	1.10 ± 0.08	0.018 ± 0.002	inches
	3.2 ± 0.2/-0	1.85 ± 0.20	28.0 ± 2.0	0.45 ± 0.05	mm
RNM 1/2	0.24 ± 0.01	0.09 ± 0.01	1.10 ± 0.08	0.023 ± 0.002	inches
	6.0 ± 0.3	2.4 ± 0.2	28.0 ± 2.0	0.60 ± 0.05	mm
RN 1	0.433 ± 0.04	0.177 ± 0.02	1.18 ± 0.12	0.032 ± 0.004	inches
	11.0 ± 1.0	4.5 ± 0.5	30 ± 3.0	0.8 ± 0.1	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	± 1.0%
Terminal Strength	MIL-STD 202, Method 211	± 0.2%
Temperature Cycling	JESD22 Method JA-104	± 1.0%
Moisture Resistance	MIL-STD 202, Method 106	± 0.5%