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Metal Film Fixed Resistor

RND components

Specifications Per

- IEC 60115-1
- MIL-R-10509



Features

- Conformal multi-layer coating
- Color code per MIL & EIA standards
- Special tin-plated electrolytic copper lead wire
- Products meet RoHS requirements and do not containsubstances of very high concern identified by European Chemicals Agency

Applications

- Industrial
- Telecommunication
- Medical equipment
- Automotive

PART NUMBER

Example: RND 155M207F10K0TKRTB5K0

RND 155M207	F	10K0	TKR	TB5K0
Type	Tolerance*	Resistance	TCR*	Packaging
	B (0.1%) C (0.25%) D (0.5%) F (1%) G (2%) J (5%)	10 kΩ **4-character code** containing - 3 significant digits 1 letter multiplier OHM MULTIPLIER R = 1 K = 10^3 M = 10^6 G = 10^9	50ppm **3-character code** TKQ = ± 25 ppm TKR = ± 50 ppm TKS = ± 100 ppm	**5-character code** TB = Tape Box (pieces per box) 2K0 = 2,000 5K0 = 5,000 7K0 = 7,000

*** Listed values may not be applicable across product types or to all resistance values. Please check with us before placing order.**

General Specifications

Type	Power Rating At 70°C	Maximum Working Voltage	Maximum Overload Voltage	Minimum Resistance	Maximum Resistance	Resistance Tolerance	Available Resistance Values
RND 155M207	3/5W	250V	350V	0.1Ω	10MΩ	±5%	E-24
				1Ω	1MΩ	±1%	E-24/E-96
				20Ω	1MΩ	±0.1%~0.5%	E-24/E-192

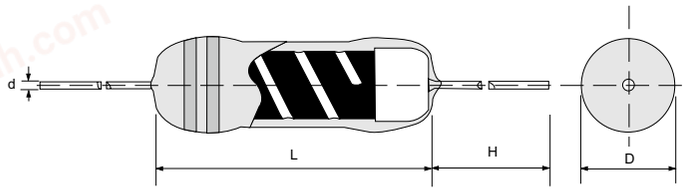
Technical Summary

Dielectric Withstanding Voltage	500 VAC / VDC
Temperature Coefficient	±25, ±50, ±100 PPM / °C
Operating Temperature Min.	-55 °C
Operating Temperature Max.	155 °C
Insulation Resistance	10000 MΩ

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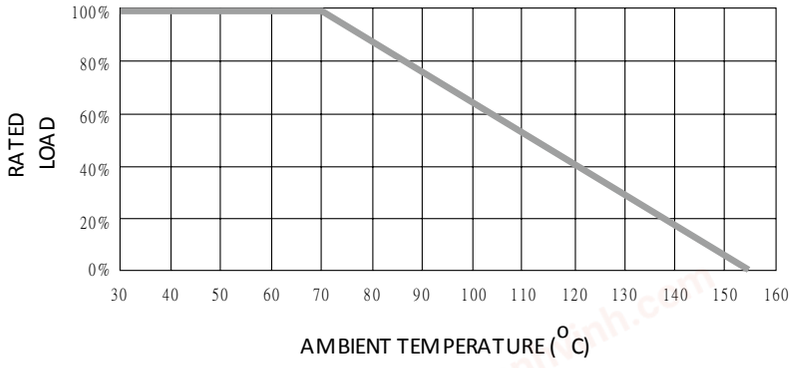
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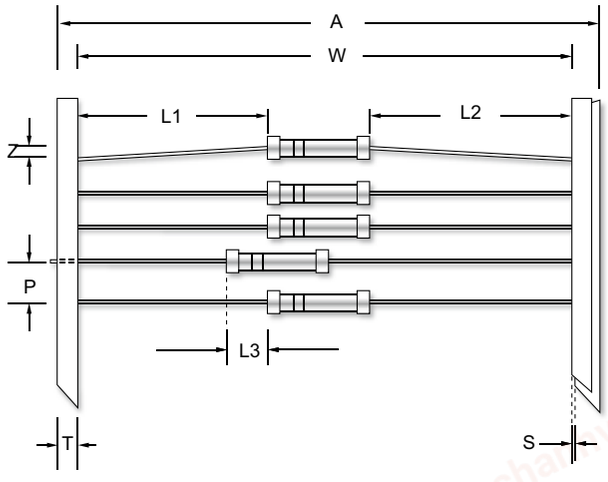
Dimensions

Body Length	6.5 ± 1.0 mm
Body Diameter	2.4 ± 0.2 mm
Lead Wire Length	26 ± 3 mm
Lead Wire Diameter	0.55 ± 0.03 mm
Net Weight per 1000 Pcs	220 g

Power Derating Curve



Taping / Packing Specifications



Unit (mm)

Type	A Max.	L1-L2 (Max.)	L3 (Max.)	P ±0.5	S (Max.)	T ±0.5	W ±1.5	Z (Max.)
RND 155M207	65	±1.0	0.5	5.0	0.8	6.0	52.5	1.2

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Performance Specifications

Characteristics	Test Conditions	Limits
Short Time Over Load	**IEC 60115-1 4.13** 5 seconds 2.5x rated voltage (not over max. overload voltage)	±0.2%
Load Life In Humidity	**IEC 60115-1 4.24** 56 days rated load (not over max. working voltage) at (40±2)°C and (93±3)% relative humidity	±0.75%
Load Life	**IEC 60115-1 4.25.1** Rated load (not over max. working voltage) 1,000 hours with 1.5 hours ON, 0.5 hours OFF, at (70±2)°C	±0.75%
Resistance To Soldering Heat	**IEC 60115-1 4.18.2** Leads immersed till 3mm from the body in (260±5)°C solder for 10±1 seconds	±0.2%
Solderability	**IEC 60115-1 4.17.2** Solder area covered after (235±3)°C/(2±0.2) seconds with flux applied	95% min.coverage
Vibration	**IEC 60115-1 4.22** Six hours in each parallel and axial direction with a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz.	±0.1%
Thermal Endurance	**IEC 60115-1 4.25.3** 1000 hours at 155°C without load	±0.2%
Thermal Shock	**IEC 60115-1 4.19** -55°C 30minutes, +155°C 30minutes, 5 cycles	±0.2%