

Metal Oxide Resistors, Special Purpose, High Voltage



FEATURES

- Low TCR: ± 200 ppm/ $^{\circ}\text{C}$ standard; ± 100 ppm/ $^{\circ}\text{C}$, ± 50 ppm/ $^{\circ}\text{C}$ available
- $\pm 1\%$ standard to 1 G Ω ; $\pm 5\%$ above 1 G Ω
 $\pm 0.5\%$ available in ± 50 ppm/ $^{\circ}\text{C}$ only.
Special tolerance and/or temperature coefficient matching available.
- High Voltage (up to 8 kV)
- For oil bath or open air operation
- Matched sets available
- Special testing available upon request
- Compliant to RoHS directive 2002/95/EC



RoHS*
COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	HISTORICAL MODEL	POWER RATING			VOLTAGE RATING V_{\equiv}	RESISTANCE RANGE Ω ⁽²⁾			
		$P_{25^{\circ}\text{C}}$ W ⁽¹⁾	$P_{70^{\circ}\text{C}}$ W ⁽¹⁾	$P_{125^{\circ}\text{C}}$ W ⁽¹⁾		200 ppm	100 ppm	50 ppm	NON-INDUCTIVE ⁽³⁾
RNX025	RNX-1/4	0.5	0.36	0.25	750 V	1K to 100M	1K to 100M	1M to 22M	100R to 100K
RNX038	RNX-3/8	1.0	0.72	0.5	1.5 kV	1K to 1G	1K to 100M	1M to 50M	100R to 100K
RNX050	RNX-1/2	1.2	0.86	0.6	2 kV	1K to 2G	1K to 250M	1M to 100M	100R to 100K
RNX075	RNX-3/4	2.0	1.44	1.0	3 kV	1K to 2G	1K to 500M	1M to 100M	100R to 100K
RNX100	RNX-1	2.5	1.8	1.25	4 kV	1K to 2G	1K to 500M	1M to 100M	100R to 1M
RNX125	RNX-1-1/4	3.0	2.16	1.5	5 kV	1K to 2G	1K to 500M	-	100R to 1M
RNX150	RNX-1-1/2	4.0	2.88	2.0	6 kV	1K to 2G	1K to 500M	-	100R to 1M
RNX200	RNX-2	5.0	3.6	2.5	8 kV	1K to 2G	1K to 500M	-	100R to 1M

Notes

- ⁽¹⁾ Increase wattage by 25 % for 0.032" [0.813 mm] diameter leads
- ⁽²⁾ For resistance values above and below those listed please contact us
- ⁽³⁾ Non inductive ± 200 ppm/ $^{\circ}\text{C}$ TCR only
- **All resistance values are calibrated at 100 V_{DC}. Calibration at other voltages available.**
- Part marking: Print marked - DALE, model, value, tolerance, TCR, date code (model and date omitted on RNX-1/4)
- Special modifications:
 - Special preconditioning (power aging, temperature cycling etc.) to customer specifications
 - Non-helixed resistors can be supplied for critical high frequency applications (non-inductive)

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: RNX05010K0KKLB (preferred part numbering format)

R N X 0 5 0 1 0 K 0 K K L B

GLOBAL MODEL (See Standard Electrical Specifications table)	RESISTANCE VALUE	TOLERANCE CODE	TEMP. COEFFICIENT	PACKAGING ⁽⁴⁾	CONSTRUCTION	SPECIAL
	R = Decimal K = Thousand M = Million G = Billion 910R = 910 Ω 10M0 = 10 M Ω 1G00 = 1.0 G Ω	D = $\pm 0.5\%$ F = $\pm 1\%$ G = $\pm 2\%$ J = $\pm 5\%$ K = $\pm 10\%$	H = 50 ppm K = 100 ppm N = 200 ppm	EL = Lead (Pb)-free, Lacer EB = Lead (Pb)-free, T/R (1000 pcs) EE = Lead (Pb)-free, T/R (1000 pcs) LB = Tin/Lead, Lacer R6 = Tin/Lead, T/R (1000 pcs) RC = Tin/Lead, T/R (1000 pcs) RF = Tin/Lead, T/R (1000 pcs)	Blank = Standard N = Non-inductive P = 0.032" \varnothing leads	Blank = Standard (Dash number) (Up to 3 digits) From 1 to 999 as applicable

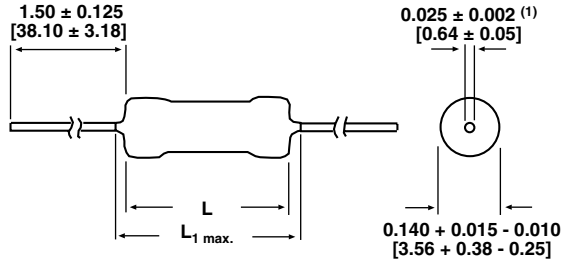
Historical Part Number example: RNX-1/210K0KK (will continue to be accepted)



Notes

- ⁽⁴⁾ Some packaging codes are model specific
- * Pb containing terminations are not RoHS compliant, exemptions may apply.

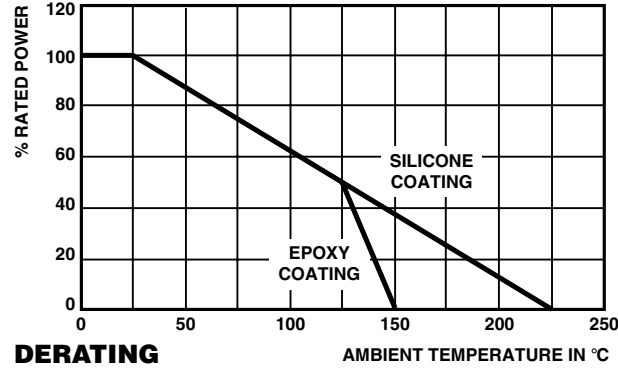
DIMENSIONS



Note
(1) Available with 0.032" [0.813 mm] leads ± 0.002" [0.051 mm]

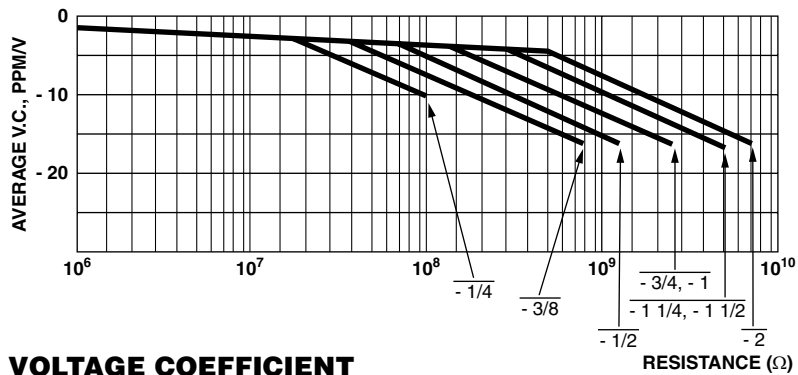
GLOBAL MODEL	DIMENSIONS in inches [millimeters]	
	L	L _{1 max.}
RNX025	0.290 ± 0.020 [7.37 ± 0.51]	0.358 [9.09]
RNX038	0.420 ± 0.020 [10.67 ± 0.51]	0.470 [11.94]
RNX050	0.540 ± 0.020 [13.72 ± 0.51]	0.595 [15.11]
RNX075	0.790 ± 0.020 [20.07 ± 0.51]	0.845 [21.46]
RNX100	1.040 ± 0.020 [26.42 ± 0.51]	1.100 [27.81]
RNX125	1.290 ± 0.020 [32.77 ± 0.51]	1.350 [34.16]
RNX150	1.540 ± 0.020 [39.12 ± 0.51]	1.600 [40.51]
RNX200	2.040 ± 0.020 [51.82 ± 0.51]	2.100 [53.34]

TECHNICAL SPECIFICATIONS									
PARAMETER	UNIT	RNX025	RNX038	RNX050	RNX075	RNX100	RNX125	RNX150	RNX200
Insulation Resistance	Ω	≥ 10 ¹¹							
Category Temperature Range	°C	Epoxy coated = - 55/+ 150; Silicone coated = - 55/+ 225							



MATERIAL SPECIFICATIONS	
Element	High temperature fired cermet film
Core	High purity 96 % alumina
Coating	Flame-retardant epoxy on RNX025 and RNX038, flameproof silicone on RNX050 to RNX200
Termination	Standard lead material is solder - coated copper. Solderable and weldable.

MECHANICAL SPECIFICATIONS	
Terminal Strength	5 pound pull test
Solderability	Continuous satisfactory coverage when tested in accordance with MIL-STD-202, Method 208





Disclaimer

All product specifications and data are subject to change without notice.

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