

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

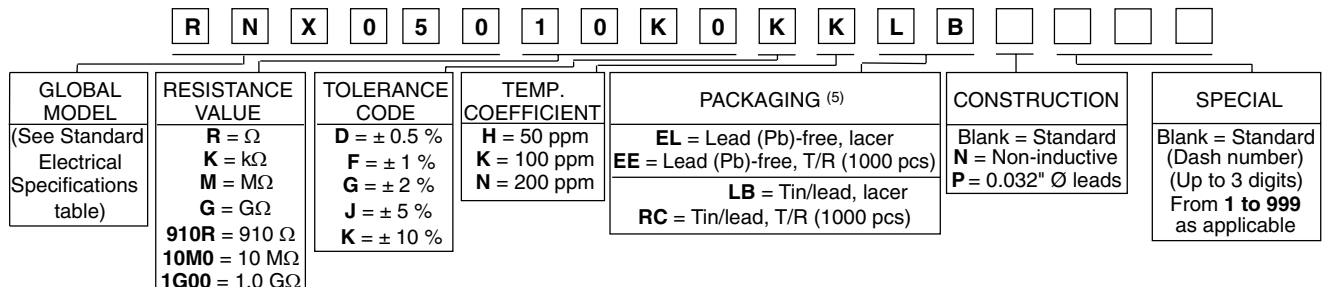
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING			MAXIMUM WORKING VOLTAGE ⁽⁴⁾ V	RESISTANCE RANGE Ω ⁽²⁾			
		$P_{25^{\circ}\text{C}}$ W	$P_{70^{\circ}\text{C}}$ ⁽¹⁾ W	$P_{125^{\circ}\text{C}}$ ⁽¹⁾ W		± 200 ppm/ $^{\circ}\text{C}$	± 100 ppm/ $^{\circ}\text{C}$	± 50 ppm/ $^{\circ}\text{C}$	NON-INDUCTIVE ⁽³⁾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

Notes

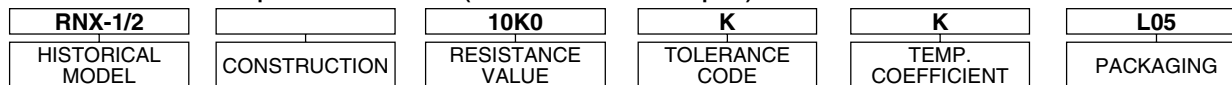
- ⁽¹⁾ Increase wattage by 25 % for 0.032" (0.813 mm) diameter leads
- ⁽²⁾ For resistance values above and below those listed please contact us
- ⁽³⁾ Non-inductive ± 200 ppm/ $^{\circ}\text{C}$ TCR only
- ⁽⁴⁾ Continuous working voltage shall be $\sqrt{P \times R}$ or maximum working voltage, whichever is less.
- 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)



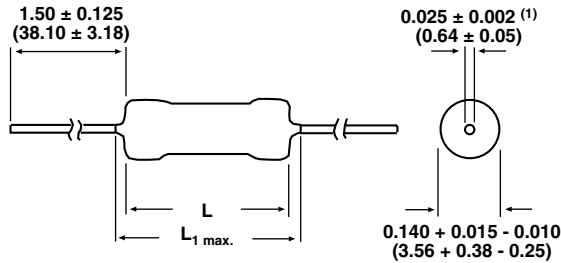
Historical Part Number example: RNX-1/210K0KK (will continue to be accepted)



Note

- ⁽⁵⁾ Some packaging codes are model specific
- * Pb containing terminations are not RoHS compliant, exemptions may apply.

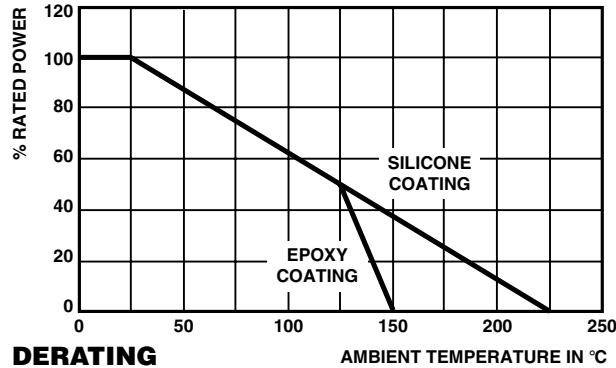
DIMENSIONS



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

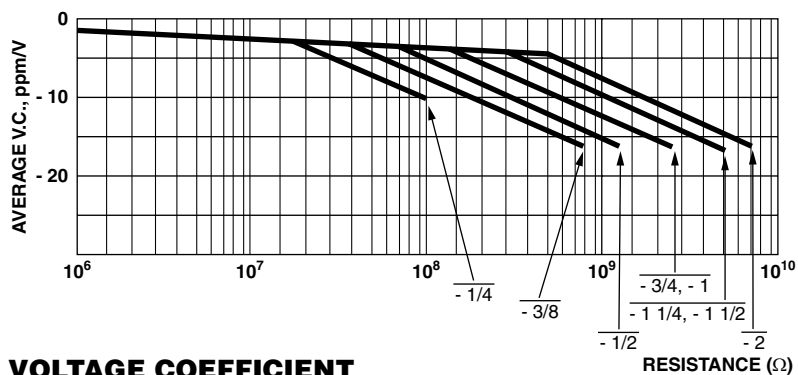
GLOBAL MODEL	DIMENSIONS in inches (millimeters)	
	L	L _{1 max.}
RNX025	0.290 ± 0.020 (7.37 ± 0.51)	0.358 (9.09)
RNX038	0.420 ± 0.020 (10.67 ± 0.51)	0.470 (11.94)
RNX050	0.540 ± 0.020 (13.72 ± 0.51)	0.595 (15.11)
RNX075	0.790 ± 0.020 (20.07 ± 0.51)	0.845 (21.46)
RNX100	1.040 ± 0.020 (26.42 ± 0.51)	1.100 (27.94)
RNX125	1.290 ± 0.020 (32.77 ± 0.51)	1.350 (34.29)
RNX150	1.540 ± 0.020 (39.12 ± 0.51)	1.600 (40.64)
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





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