Metal Oxide Resistors, Special Purpose, High Voltage

FEATURES

- Low TC: ± 200 ppm/°C standard. ± 100 ppm/°C, ± 50 ppm/°C available.
- ± 1 % standard to 1 GΩ; ± 5 % above 1 GΩ ± 0.5 % available in ± 50 ppm/°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
- Lead (Pb)-free version is RoHS compliant

Pb Available

e3

RoHS* COMPLIANT

STANDARD ELECTRICAL SPECIFICATIONS

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

NOTE:

** Increase wattage by 25 % for 0.032" [0.813 mm] diameter leads.

*** For resistance values above and below those listed please contact us.

**** Non inductive ± 200 ppm/°C TC only.

- **All resistance values are calibrated at 100 VDC. Calibration at other voltages available**
- Part Marking: print marked - DALE, Model, Value, Tolerance, TC, 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	RESISTANCE VALUE	TOLERANCE CODE	TEMP. COEFFICIENT	PACKAGING**	CONSTRUCTION	SPECIAL
(see Standard Electrical Specifications table)	**R** = Decimal **K** = Thousand **M** = Million **G** = Billion **910R** = 910 Ω **10M0** = 10 MΩ **1G00** = 1.0 GΩ	**D** = ± 0.5 % **F** = ± 1 % **G** = ± 2 % **J** = ± 5 % **K** = ± 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" Ø leads	Blank = Standard (Dash Number) (up to 3 digits) From **1-999** as applicable

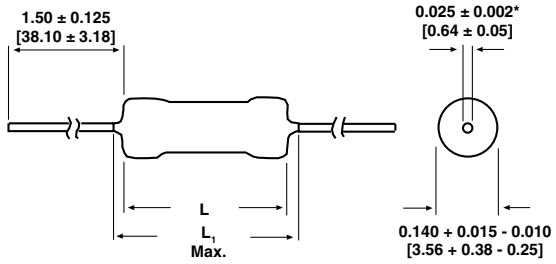
Historical Part Number example: RNX-1/210K0KK (will continue to be accepted)

RNX-1/2		10K0	K	K	L05
HISTORICAL MODEL	CONSTRUCTION	RESISTANCE VALUE	TOLERANCE CODE	TEMP. COEFFICIENT	PACKAGING

NOTE: ** Some packaging codes are model specific.

* Pb containing terminations are not RoHS compliant, exemptions may apply.

DIMENSIONS

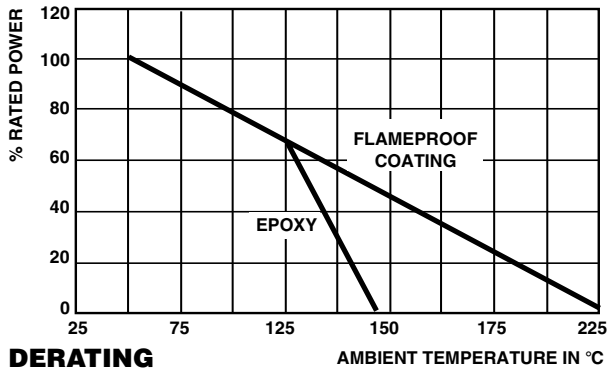


* Available with 0.032" [0.813 mm] leads ± 0.002" [0.051 mm].

GLOBAL MODEL	DIMENSIONS in inches [millimeters]	
	L	L_{1Max}
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	- 55/+ 155							



DERATING

MATERIAL SPECIFICATIONS

Element:	High temperature fired cermet film
Core:	High purity 96 % alumina
Coating:	Epoxy on RNX025 and RNX038 Flameproof 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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