

CERAMIC ROD RESISTORS

Electrical Specifications

- Resistance Range: 10 to 500 Ohms
- Resistance Tolerance: $\pm 1\%$, 2% and 5%
- Temperature Coefficient: ± 75 ppm/ $^{\circ}\text{C}$
- Frequency Range: DC to 26.5GHz when mounted on properly designed cavity
- Temperature Range: -65°C to $+175^{\circ}\text{C}$
- Power Rating: As noted in chart @ 25°C when mounted on suitable heat sink

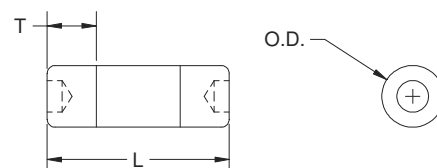
Material Specifications

- Substrate Rod: Alumina, Beryllium Oxide, or Aluminum Nitride
- Thin Film: Nicrome (Nickel/Chromium)
- Terminal Ends: Nickel/tin plated (Gold plating also available)
- Nickel Plating (Standard): Nickel Per MIL-C-26074, Class 1, Grade B
- Gold Finish (if applicable): Per MIL-G-45204, Type I (99.7% pure), Grade A (90 Knoop hardness), Class 1 (0.00005 in thickness)

ALUMINA ROD RESISTORS

TYPE	O.D. ± 0.003	L ± 0.010	T ± 0.015	POWER WATTS
R40L115	0.040 [1.02]	0.115 [2.92]	0.031 [0.79]	0.050
R62L375	0.062 [1.57]	0.375 [9.53]	0.047 [1.19]	0.050
R125L250H*	0.125 [3.18]	0.250 [6.35]	0.063 [1.60]	1.00
R125L406	0.125 [3.15]	0.406 [10.31]	0.109 [2.77]	1.50
R125L500	0.125 [3.15]	0.500 [12.70]	0.063 [1.60]	2.00

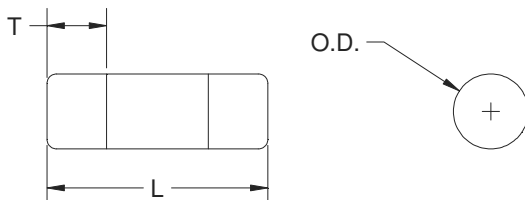
Mechanical Outline (*for R125L250H Only)



BERYLLIUM OXIDE ROD RESISTORS

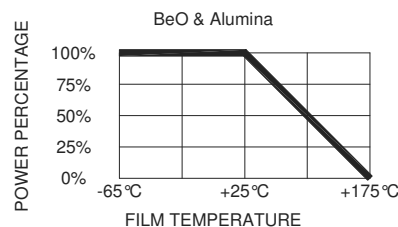
TYPE	O.D. ± 0.003	L ± 0.010	T ± 0.015	POWER WATTS
R40B115	0.040 [1.02]	0.115 [2.92]	0.031 [0.79]	5.0
R60B120	0.060 [1.52]	0.120 [3.05]	0.031 [0.79]	10.0
R62B187	0.062 [1.57]	0.187 [4.75]	0.063 [1.60]	10.0
R62B375	0.062 [1.57]	0.375 [9.53]	0.047 [1.19]	10.0
R125B500	0.125 [3.15]	0.500 [12.70]	0.063 [1.60]	25.0
R250B750	0.250 [6.35]	0.750 [19.05]	0.125 [3.15]	40.0
R375B750	0.375 [9.53]	0.750 [19.05]	0.125 [3.15]	75.0

Mechanical Outline



Dimensions are in inches [mm]

Derating Curve



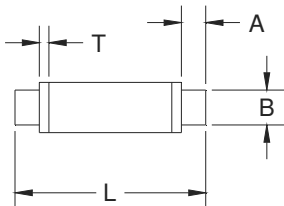
P.O. BOX 18802, Clearwater, FL 33762
1-800-526-0704

CERAMIC ROD RESISTORS

ALUMINA SHOULDERED ROD RESISTORS

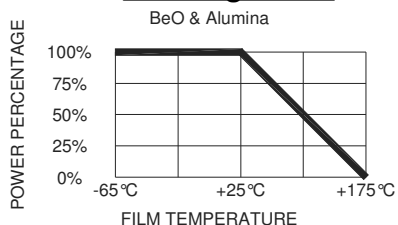
TYPE	O.D.±0.002	L±0.010	T±0.015	A±0.010	B±0.015	POWER WATTS
R125S500	0.125 [3.18]	0.500 [12.70]	0.025 [0.64]	0.064 [1.63]	0.092 [2.34]	0.050

Mechanical Outline



Dimensions are in inches [mm]

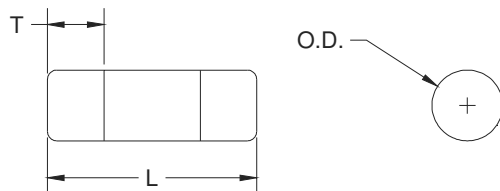
Derating Curve



ALUMINUM NITRIDE ROD RESISTORS

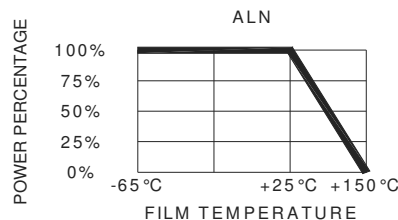
TYPE	O.D.±0.003	L±0.010	T±0.015	POWER WATTS
R40N115	0.040 [1.02]	0.115 [2.92]	0.031 [0.79]	4.0
R60N120	0.060 [1.52]	0.120 [3.05]	0.031 [0.79]	8.0
R62N187	0.062 [1.57]	0.187 [4.75]	0.063 [1.60]	8.0
R62N375	0.062 [1.57]	0.375 [9.53]	0.047 [1.19]	8.0
R125N500	0.125 [3.15]	0.500 [12.70]	0.063 [1.60]	20.0
R250N750	0.250 [6.35]	0.750 [19.05]	0.125 [3.15]	31.0
R375N750	0.375 [9.53]	0.750 [19.05]	0.125 [3.15]	59.0

Mechanical Outline



Dimensions are in inches [mm]

Derating Curve



Ordering Information:

Example: R40 B 115 XXX X G

Model # and _____
 Outside Diameter _____
 Material: _____
 B: Beryllium Oxide
 L: Alumina
 S: Alumina Shouldered
 N: Aluminum Nitride
 Length _____
 Resistance _____
 Tolerance _____
 G: Gold Plated _____

(No suffix designation for standard Tin over Nickel Plating)

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RES-NET MICROWAVE