

**High Voltage**  
**High Energy**  
**Non-Inductive**

**High-Energy Rod and Tube** resistors are especially useful in applications requiring maximum energy density in a tube resistor. The standard termination is a metalized ferrule. Alternatives such as radial tabs and high voltage ferrules allow for mounting options or enhanced performance. Available configuration options optimize performance in air, oil or other dielectric.

**Replacement Carbon-Ceramic Tube** resistors offer drop-in substitution and expanded resistance range, while retaining the advantages of high surge energy, high voltage withstand, and non-inductance. The thinwall tube provides more effective convection cooling.

**High Energy Rods and Tubes**

Part Number	O.D.(mm)	I.D. (mm)	L (cm)	Energy <sup>1</sup> (J)	Power <sup>2</sup> (W)	Impulse (kV)	Resistance Range (Ω)	Comment
R1005AXXXX	10	—	5.0	1,000	10	1.6 * log R	10—1.0K	Solid Rod
R1010AXXXX	10	—	10	2,000	20	3.0 * log R	22 — 2.2K	Solid Rod
R2008AXXXX	20	—	7.5	6,000	24	4.4 * log R	10 — 2.2K	Solid Rod
T2515AXXXX	25	15	15	11,000	55	6.5 * log R	15 — 2.2K	High Energy Tube
T2525AXXXX	25	15	25	22,000	90	8.0 * log R	22 — 4.7K	High Energy Tube
T2546AXXXX	25	15	46	45,000	150	12.0 * log R	47 — 10.0K	High Energy Tube
T5030AXXXX	50	35	30	94,000	200	8.5 * log R	15 — 1.5K	High Energy Tube
T5046AXXXX	50	35	45	140,000	300	12.0 * log R	22 — 2.2K	High Energy Tube

Notes: 1. Single Impulse 2. Rated @ 25°C. Derate linearly to 0W @ 200°C.

**Replacement Carbon-Ceramic Tubes**

Part Number	Replace Type	O.D. (mm)	I.D. (mm)	L (cm)	Energy <sup>1</sup> (Joules)	Power <sup>2</sup> (Watts)	Peak Voltage <sup>3</sup>	Resistance Range (Ω)
T1305CXXXX-DS	884AS	12.7	5.6	5.1	1,400	12	5,000	10—25K
T1906CXXXX-DS	885AS	19.1	12.7	6.4	2,800	15	8,000	6.8—22k
T1913CXXXX-DS	886AS	19.1	12.7	13	7,500	30	20,000	15- 47K
T2515CXXXX-DS	887AS	25.4	19	15	13,000	50	30,000	8.2—33K
T2520CXXXX-DS	888AS	25.4	19	20	16,500	75	45,000	12—42K
T2530CXXXX-DS	889AS	25.4	19	30	27,000	100	75,000	18—68K
T2546CXXXX-DS	890AS	25.4	19	46	43,000	150	120,000	22—100K
T3815CXXXX-DS	1026AS	38	25	15	30,000	70	30,000	3.3— 10K
T3820CXXXX-DS	1028AS	38	25	20	46,000	100	45,000	3.9— 15K
T3830CXXXX-DS	1032AS	38	25	30	75,000	150	75,000	4.7— 22K
T3846CXXXX-DS	1038AS	38	25	46	119,000	225	120,000	6.8— 33K

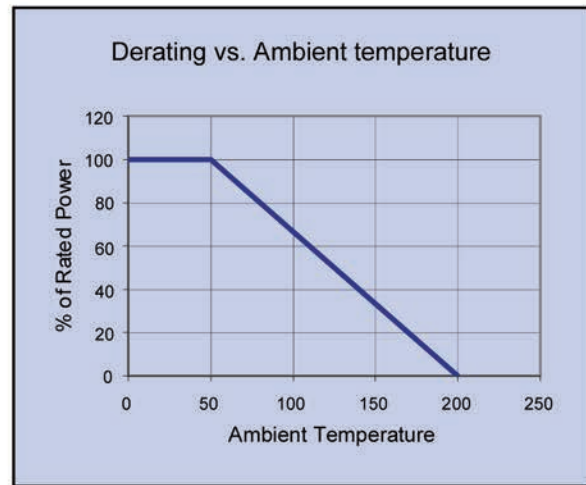
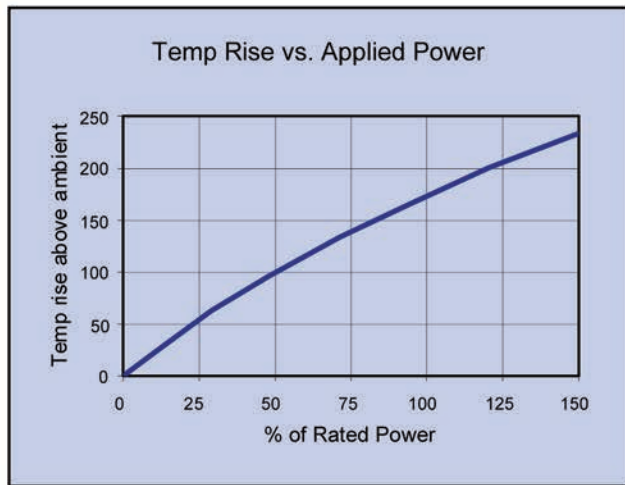
Notes: 1. One-second rate 2. Horizontal mount free air 3. Single impulse

# Carbon Ceramic Rod & Tube Resistors

How it works...



Parameter	Maximum $\Delta R$	Test Method
Life Test	+5%	MIL-STD-202F, method 108A. except 50°C.
Single Pulse Energy	+/-1.5%	Single pulse capacitor discharge of 100% Rated Energy @1000 vDC
Short-time Overload	+/-2.5%	5x rated power. 2 seconds ON, 5 seconds OFF, 5 cycles.
Long-term High Temperature	+/-2.0%	1000 hours @ 150 °C
Temperature Coefficient of R	+0,- 1500ppm	Two point measurement, 20°C and 100°C



### Ordering Information

**I DD LL C XXX X-DS\***

- I**: Series
- DD**: O.D. (mm)
- LL**: Length (cm)
- C**: Style
- XXX**: Resistance, 2 digits + mult. Example, 331 = 330 ohms <10 ohms, R= decimal
- X-DS\***: Tolerance
  - J = +/- 5%
  - K = +/- 10%
  - L = +/- 20%

\*-DS = std. configuration for use in air  
Conformal dielectric coating +  
Ag/epoxy contacts

