

**HIGH HEAT TRANSFER CORES**

From 1.5 to 4 times higher power ratings than conventional resistors of equivalent size.

**FEATURES:**

- Miniature size
- Maximum power to size ratio
- Higher stability
- Optimum heat dissipation
- High temperature silicone protected
- Noninductive windings available

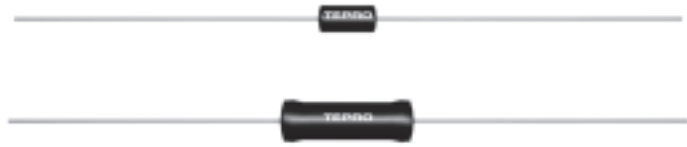
**VARIATIONS:**

- Special tolerance
- Special TC on request
- Lead length and diameter
- Weldable leads
- Molded types available

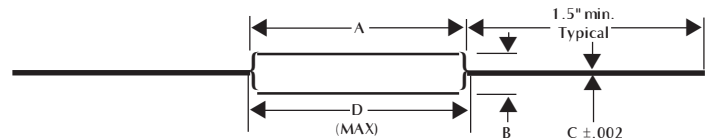
**GENERAL**

**SPECIFICATIONS:**

- Standard tolerances:
  - ±0.05 to 5%
- Dielectric strength:
  - 500 VAC TG-1, TG-2, TG-3
  - 1000 VAC all others
- Insulation resistance:
  - 1000 megohms minimum
- Temperature coefficients:
  - 10Ω and above: ±20ppm
  - 1Ω to 9.9Ω: ±50ppm
  - Below 1Ω: ±90ppm
- Short time overload:
  - 5 sec. at 5x rated power
- Terminal strength:
  - 5lb. pull test TG-1, TG-2, TG-3
  - 10lb. pull test all others
- Standard terminals:
  - Tinned copper weld
- Core: Beryllium oxide or high purity alumina
- Winding: Copper-nickel or nickel-chrome alloy as required by resistance
- Sealant: High-temperature silicone
- Power rating: Based on;
  - (1) Characteristic U
    - (a) full power operation at 25°C
    - (b) 0.5% maximum Δ R in 2000 hour load life
    - (c) maximum hotspot 275°C



**TYPE "TG"  
SILICONE PROTECTED  
HIGH HEAT TRANSFER CORES**

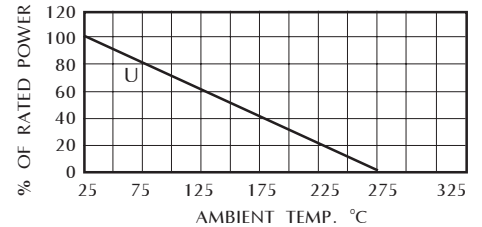


**DERATING:**

Operation in ambients above 25°C require derating in accordance with the Derating Curve.

Note: The use of high purity cores permits "TG" types to be operated at significantly higher wattages than conventional types using regular steatite or alumina. The outstanding thermal conductivity of TG cores, coupled with TEPRO time-proven, high-temperature silicone protection results in outstanding performance and optimum power to size ratio.

**DERATING:\***



**STANDARD CONFIGURATIONS AND ELECTRICAL SPECIFICATIONS:**

TEPRO TYPE	POWER RATINGS (Watts)	RESISTANCE RANGE (Ohms)	DIMENSIONS: Inches ** (mm)				
			A ±.031 (±.787)	B ±.031 (±.787)	C ±.002 (±.050)	D ±.031 (±.787)	E MIN.
TG 1	1	0.1-3.5K	0.235 (5.969)	0.083 (2.108)	0.020 (0.508)	0.300 (7.620)	1.250 (31.750)
TG 2	2	0.1-5.0K	0.235 (5.969)	0.083 (2.108)	0.020 (0.508)	0.300 (7.620)	1.250 (31.750)
TG 3	3	0.1-10.0K	0.406 (10.312)	0.093 (2.362)	0.025 (0.635)	0.500 (12.700)	1.250 (31.750)
TG 5	5	0.1-20.0K	0.525 (13.335)	0.187 (4.750)	0.032 (0.813)	0.625 (15.875)	1.250 (31.750)
TG 6	6	0.1-40.0K	0.600 (15.240)	0.220 (5.588)	0.032 (0.813)	0.675 (17.145)	1.250 (31.750)

**Notes:**  
 For non-inductive windings add "NI" to type.  
 Maximum resistance 1/3 that shown.  
 \* Characteristic U 275°C hotspot.  
 \*\* Metric dimensions in (mm) for information only. 1"=25.4mm.  
 D dimensions is clean-lead to clean-lead.  
 All data and dimensions subject to change without notice.