



Thermoelectrics

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Thermal Grease TG-003/004

Non-silicone Compound
High Thermal Conductivity
Low Thermal Resistance

IDEAL FOR:

Thermoelectric and Heatsink Interface
Replaces Traditional Silicone Grease

DESCRIPTION:

TG-003/004 is a re-workable, alumina filled, electrically insulating and thermally conductive paste which exhibits outstanding thermal transfer in comparison to most adhesives. The non-curing nature of TG-003/004 makes it ideal as an interfacial compound for thermal transfer for thermoelectrics and heat sinks. TG-003/004 is semi-conductor grade with low ionic impurities and ultra fine thermally conductive crystallites. It has one of the lowest weight losses among thermal greases and molecularly stable for 150°C continuous exposure.

AVAILABILITY:

TG-003/004 is available in the following quantities.

Model Number	Quantity
TG-003	10 gram jar
TG-004	227 gram jar

APPLICATION PROCEDURES:

- (1) Apply a thin continuous film of grease to module hot side surface or to module area on hot side heat exchanger. A printer's ink roller works well for this.
- (2) Locate module on hot side heat exchanger, hot side down.
- (3) Gently oscillate module back and forth exerting uniform downward pressure, noting efflux of thermal compound around edges of module. Continue motion until resistance is felt.

TYPICAL PROPERTIES

Electrical Resistivity	>1X10 ¹³ ohm-cm
Tensile Elongation (%)	Grease
Cured Density (gm/cc)	2.3
Thermal Conductivity	2.0 W/m-°C 14 Btu-in/hr-ft ² -°F
Linear Thermal Expansion Coeff. (ppm/°C)	Non-curing
Maximum Continuous Operation Temp. (°C)	150 @0.5 rpm 500,000 cp

CURE SCHEDULES:

Non-Curing

SHELF LIFE:

Storage temperature	Shelf Life
25 °C	1 year

"USES FOR THERMOELECTRIC COOLING ARE AS LIMITLESS AS THE IMAGINATION"