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Non Curing

ELECTRICALLY NON-CONDUCTIVE Outstanding Thermal Conductivity Interfacial Compound

#### **IDEAL FOR:**

Processor to heatspreader interface Processor module to heatsink interface Processor to heatpipe interface

### **DESCRIPTION:**

COOL-SILVER G5 is an improved version of COOL-SILVER G3 and G4. It is a non-curing, non-silicone, thermal interface modified silver filled grease that is not electrically conductive in bulk. The non-curing COOL-SILVER G5 is by far the lowest thermal resistance grease that is not electrically conductive when compared with the best of the silver and diamond greases. It is designed specifically for high power devices requiring less than 0.0015 °C-in²/watt thermal resistance (0.001 inch interface layer).

COOL-SILVER G5 will become a slightly more viscous after dispensing. It will remain as a thermally conductive interface medium with non-electrically conductive properties at all time. Temperatures greater than 100°C, will cause grease to gel.

#### **AVAILABILITY:**

COOL SILVER G5 is available in syringes for automatic needle dispensing. For consumer applications, it is packaged in 3.5 gram syringes for ease of dispensing.

## **APPLICATION PROCEDURES:**

- (1) Dispense grease onto clean substrate.
- (2) Do not dilute COOL-SILVER G5.
- (3) Try to spread very thin grease material on both sides of the substrate to ensure complete coverage and removal of trapped air.

# COOL SILVER COOL-SILVER G5

#### TYPICAL PROPERTIES\*

Electrical Resistivity N/A ohm-cm

°C/

Dielectric Strength (Volts/mil) N/A
Glass Transition Temp.(°C) N/A
Lap-Shear Strength N/A

Device Push-off Strength N/A

Hardness (Type) N/A

Cured Density (gm/cc) 5.0 ±10%

Thermal Conductivity >105 Btu-in/hr-ft²-°F

>15 W/m-°C

Linear Thermal Expansion Non-curing

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <100

Avg.Viscosity @ 5 rpm, 25°C 60,000 cp ±20% (Brookfield DV-1, Spindle CP51)

<u>Temperature</u>

<u>Time</u>

Pressure

Non-Curing

Even though COOL-SILVER G5 is not conductive in bulk or on fine line features.

**SHELF LIFE:** 

Storage temperature

Shelf Life 1 yr

from dom in syringes

<u>CAUTION:</u> This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details. The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is to be used in manufacturing and in the final product. Under no circumstance shall Al Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

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