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COOL SILVER

COOL-SILVER G4

Non Curing
ELECTRICALLY NON-CONDUCTIVE
Outstanding Thermal Conductivity
Interfacial Compound

TYPICAL PROPERTIES*

Electrical Resistivity	**N/A**	**ohm-cm**
(ºC/)		
Dielectric Strength (Volts/mil)	**N/A**	
Glass Transition Temp.(ºC)	**N/A**	
Lap-Shear Strength	**N/A**	
Device Push-off Strength	**N/A**	
Hardness (Type)	**N/A**	
Cured Density (gm/cc)	**3.6 ±10%**	
Thermal Conductivity	**>83 Btu-in/hr-ft²-ºF** **>12 W/m-ºC**	
Linear Thermal Expansion Coeff. (ppm/ºC)	**Non-curing**	
Maximum Continuous Operation Temp. (ºC)	**<150C**	
Avg.Viscosity @ 5 rpm, 24ºC (Brookfield DV-1, Spindle CP51)	**50,000 cp ±20%**	

* 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 intended to be used in manufacturing and in the final product.

IDEAL FOR:

- **Processor to heatspreader interface**
- **Processor module to heatsink interface**
- **Processor to heatpipe interface**
- **Highest power dissipation requirement**

DESCRIPTION:

COOL-SILVER G4 is the fourth generation and a lower thermal resistance version of the famed COOL-SILVER grease. It is a non-curing, non-silicone, thermal interface grease that is not electrically conductive. The non-curing COOL-SILVER G4 is by far the lowest thermal resistance grease that is not electrically conductive. It is designed specifically for high power devices requiring less than 0.0016 ºC-in²/watt thermal resistance (0.001 inch interface layer).

COOL-SILVER G4 will become slightly more viscous after dispensing. It will remain a thermally conductive interface medium with non-electrically conductive properties.

AVAILABILITY:

COOL-SILVER G4 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 G4.
(3) Try to spread very thin grease material on both sides of the substrate to ensure complete coverage and removal of trapped air.

(4) For large area of interfacing, dispense in "star-like" or "cross-like" pattern to allow for flow and fill in all sides to see slight fillets.

Temperature	Time	Pressure
Non-Curing		

COOL-SILVER G4 measured to have the lowest thermal interface resistance on device level test of all thermal greases on the market without exception.

Thermal resistance is outstanding as dispensed. The performance may improve slightly over a period of 24 hours.

Even though COOL-SILVER G4 is not conductive in bulk, individual particles may be conductive. Spreading to exposed circuit traces should be avoided.

SHELF LIFE:

Storage temperature	Shelf Life
25ºC	1 yr in syringes from d.o.m.

CAUTION: 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.