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CONDUCTIVE COOL-PAD

CP8550

"Phase-Change" Dry Pad
Melt-Flow at 55ºC @ 3 psi
High Thermal Conductivity
High Electrical Conductivity

IDEAL FOR:

- **Silicone Thermal Gasket Replacement**
- **Thermal Grease Replacement**
- **Heat-sink & Heat-Spreader Interface**
- **Thermal & Electrical Ground Plane Interface**

DESCRIPTION:

CP8550 is a silver filled, electrically conductive, low bond strength electro pad interface material designed to enhance thermal and electrical transfer from power devices to heat-sink. CP8550 has good thermal conductivity and is dry for easy handling at room temperature. It can be die-cut into any shape or size for power transistors and components. The bond strength is minimal for easy device replacement and upgrade.

When a power device goes into operation and generates heat in excess of 55ºC, CP8550 will "melt" or "reflow" to form intimate interfaces between the contact surfaces and thus dramatically reduces the thermal and electrical impedance. It provides grounding and cooling for the heat generating devices.

AVAILABILITY:

CP8550 is available in sheet sizes or as custom preforms. Standard thicknesses are 0.003", 0.006", 0.009" , 0.015" and 0.040". Special thicknesses are available.

APPLICATION PROCEDURES:

(1) Cut or pre-cut to desired size and shape.
(2) Place conductive COOL-PAD between device and heat-sink.
(3) Clamp with suitable force of more than 3 psi.

(4) Device is now ready for service.

TYPICAL PROPERTIES*

Electrical Resistivity (25 ºC/ 1 minute)	**<4X10 $^{-4}$ ohm-cm**
Dielectric Strength (Volts/mil)	**N/A**
Glass Transition Temp.(ºC)	**-55 ±10%**
Lap-Shear Strength	**N/A**
Device Push-off Strength	**<>100psi** **<>0.69 N/mm^2**
Hardness (Type)	**<40 (A)**
Cured Density (gm/cc)	**4.0 ±10%**
Thermal Conductivity	**><63 Btu-in/hr-ft^2-ºF** **>9.0 W/m-ºC**
Linear Thermal Expansion Coeff. (ppm/ºC)	**110 ±15%**
Maximum Continuous Operation Temp. (ºC)	**<150**

* 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.

Melt/Flow:Conditions

Temperature	Time	Pressure
>55ºC	0.5 sec	>3 psi

SHELF LIFE:

Storage temperature	Shelf Life
25ºC	1 yr

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.

PRODUCT DATA SHEET **Ver 2.0 4/2/2018**