

AI TECHNOLOGY INC 70 Washington Road

Princeton Jct., NJ 08550 (609) 799-9388 fax (609) 799-9308

E-Mail: ait@aitechnology.com Internet: http://www.aitechnology.com

"Phase-Change" Dry Pad Melt-Flow at 55°C @ 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-HFT is a silver filled, high flow, electrically conductive, low bond strength electro pad interface material. It is tacky on one side and designed to enhance thermal and electrical transfer from power devices to heat-sink. CP8550-HFT 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 55°C, CP8550-HFT 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-HFT 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.

CONDUCTIVE COOL-PAD CP8550-HFT

TYPICAL PROPERTIES*

Electrical Resistivity <4X10 ⁻⁴ ohm-cm

25 °C/ 1 minute

Dielectric Strength (Volts/mil) N/A
Glass Transition Temp.(°C) -55 ±10%

Lap-Shear Strength N/A

Device Push-off Strength <>100psi

<>0.69 N/mm²

Hardness (Type) <40 (A)

Cured Density (gm/cc) 4.0 ±10%

Thermal Conductivity ><63 Btu-in/hr-ft²-°F

>9.0 W/m-°C

Linear Thermal Expansion 110 ±15%

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <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

<u>Temperature</u> <u>Time</u> <u>Pressure</u> >55°C 0.5 sec >3 psi

SHELF LIFE:

Storage temperature Shelf Life 25°C 1 yr

<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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