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COOL-PAD
CP7506-HFT

Second Generation
Thermal Pad
Reflowable At 50°C
UL 94V-O / UL 746A Rated

IDEAL FOR:

- Thermal Grease Replacement**
- Thermal Gasket Replacement**
- Thermal Interface Between Power Device and Heat-Sink**
- CPU Thermal Interface**

DESCRIPTION:

CP7506-HFT is an boron nitride filled, high flow, electrically insulating, low bond strength thermalpad interface material. It is tacky on one side and designed to enhance thermal transfer from power devices to heat-sink. CP7506-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 50°C, CP7506-HFT will "melt/reflow" to form intimate interfaces between the contact surfaces. It thus dramatically reduces the thermal impedance and provides cooling for the heat generating devices.

AVAILABILITY:

CP7506-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 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°C / 1 minute)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>550
Glass Transition Temp.(°C)	-55
Lap-Shear Strength	Not Applicable
Device Push-off Strength	<100psi <0.69 N/mm ²
Hardness (Type)	<40 (A)
Cured Density (gm/cc)	2.5
Thermal Conductivity	28 Btu-in/hr-ft ² -°F 4.0 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	110
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>
>50°C	0.5 sec	>3 psi

SHELF LIFE:

<u>Storage temperature</u>	<u>Shelf Life</u>
25°C	1 yr

CAUTION: This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer to MSDS for more details.

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