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Second Generation

Thermal Pad

Reflowable At >55°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:

CP7508 is an aluminum nitride filled, electrically insulating, low bond strength thermalpad interface material designed to enhance thermal transfer from power devices to heat-sink. CP7508 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, CP7508 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:

CP7508 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 5 psi.

- (4) Device is now ready for service.

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. 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 AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.

COOL-PAD
CP7508

TYPICAL PROPERTIES*

Electrical Resistivity (25 °C/ 1 minute)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>550
Glass Transition Temp.(°C)	-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)	2.5 ±10%
Thermal Conductivity	>28 Btu-in/hr-ft ² -°F >4.0 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	110 ±15%
Maximum Continuous Operation Temp. (°C)	<150

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Melt/Flow:Conditions

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
>55°C	5 sec	>5 psi

SHELF LIFE:

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