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COOL-PAD
CP7505

Flexible From -55 to 150°C

"Phase-Change" Dry Pad
High Thermal Conductivity
Melt-Flow at 55°C @ 3 psi
UL 94V-O / UL 746A Rated

IDEAL FOR:

- THERMAL GREASE REPLACEMENT**
- THERMAL GASKET REPLACEMENT**
- THERMAL INTERFACE BETWEEN POWER DEVICE AND HEAT-SINK**
- POWER SUPPLY THERMAL INTERFACE**

DESCRIPTION:

CP7505 is an aluminum oxide filled, electrically insulating, low bond strength thermal pad interface material designed to enhance thermal transfer from power device to heat-sink. CP7505 has good thermal conductivity and is easy to handle at room temperature. Its low bond strength makes for easy device replacement and upgrade.

When power device goes into operation and generate heat in excess of 55°C, CP7505 will "melt" or "reflow" to form intimate interfaces between the contact surfaces. It thus dramatically reduces the thermal impedance and provides cooling for the heat generating device.

AVAILABILITY:

CP7505 is available in sheet sizes, reel, and as custom preforms. Standard thicknesses are 0.003", 0.006", 0.012", 0.020" and 0.040"(1.0 mm). 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 3psi .
- (4) Device is now ready for service.

TYPICAL PROPERTIES*

Electrical Resistivity (25°C/ 1s is)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>550
Glass Transition Temp.(°C)	-55
Lap-Shear Strength	<20 psi <0.14 N/mm ²
Device Push-off Strength	<40 psi <0.28 N/mm ²
Hardness (Type)	<40 (A)
Cured Density (gm/cc)	2.5
Thermal Conductivity	12 Btu-in/hr-ft ² -°F 1.7 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>
>55°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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