



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

COOL-PAD
CP7078

Flexible From -55 to 150°C
"Phase-Change" Dry Pad
High Melt-flow >70°C
Low Interface Resistance

IDEAL FOR:

- Thermal Grease Replacement**
- Thermal Adhesive Paste Replacement**
- Thermal Gasket Replacement**
- BGA Heatspreader-Die Attachment**

DESCRIPTION:

CP7078 is an aluminum nitride crystallite filled, electrically insulating, medium bond strength thermal interface materia. It is designed to enhance thermal transfer from power device to heat-sink. CP7078 is dry and handles well with automated excise-placement equipment and forms good bond with placement pressure similar to paste adhesives.

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	<100 psi <0.69 N/mm ²
Device Push-off Strength	<300 psi <2.1 N/mm ²
Hardness (Type)	<60 (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.

AVAILABILITY:

CP7078 is available in sheet sizes, reel, and as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available.

Melt/Flow Conditions

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
>70°C	0.5 sec	Nominal

APPLICATION PROCEDURES:

- (1) Cut or pre-cut to desired size and shape.
- (2) Place COOL-PAD between device and heat-sink.
- (3) If it is pre-applied onto heatspreader or die, bond parts at >70°C with placement pressure.

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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