

AI TECHNOLOGY INC

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Flexible down to -55°C High Melt-flow >85°C Outstanding Thermal Conductivity

IDEAL FOR:

Thermal Grease Replacement
Thermal Gasket Replacement
Thermal Adhesive Paste Substitute
BGA Thermal Interface Die-Attach

DESCRIPTION:

CB7078 is an aluminum nitride filled, electrically insulating, medium bond strength thermal interface material. It is designed to enhance thermal transfer from power device to heat-sink. CB7078 is dry and handles well with automated excise-placement equipment. It forms good bond at reflow > 85C with placement pressure similar to paste adhesives.

AVAILABILITY:

CB7078 is available in sheet sizes, reel, and as custom preforms. Standard thicknesses are 0.003" and 0.006". Special thicknesses are available.

APPLICATION PROCEDURES:

- (1) Cut or pre-cut to desired size and shape.
- (2) Place COOL-BOND between components. Remove film or protective paper.
- (3) Apply heat and pressure to reflow material.

COOL-BOND CB7078

TYPICAL PROPERTIES*

Electrical Resistivity >1x10 ¹⁴ ohm-cm

(25 °C/ As is

Dielectric Strength (Volts/mil) >550
Glass Transition Temp.(°C) -55 ±10%

Lap-Shear Strength <Not Applicable

Device Push-off Strength >300 psi

>2.1 N/mm²

Hardness (Type) <60 (A)

Cured Density (gm/cc) 2.2 ±10%

Thermal Conductivity 15 to 19 Btu-in/hr-ft²-°F ±10%

2.2 to 2.7 W/m-°C ±10%

Linear Thermal Expansion 110 ±15%

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) N/A

* 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

Temperature Time Pressure
>85°C 5 sec Nominal

SHELF LIFE:

Storage temperature 25°C

Shelf Life 1 yr

in sealed package

<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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