

AI TECHNOLOGY INC

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Flexible From -55 to150°C

"Phase-Change"Adhesive

High Melt-flow >135°C

Bond with Placement Pressure

Outstanding Electrical and Thermal

IDEAL FOR:

Thermal Grease Replacement Thermal Gasket Replacement Thermal Adhesive-Interface BGA Die-Heatspreader Interface

DESCRIPTION:

CB8133 is an metal filled, medium bond strength thermal interface material designed to enhance thermal transfer from power device to heat-spreader or heat-sink. CB8133 has good melt-flow to form instand bond upon reaching high enough temperature with nominal placement pressure similar to paste adhesive. CB8133 is dry and handle well with automated excise-placement equipment.

CB8133 may be slightly electrically conductive and is not recommended for electrical insulation applications. This material have been tested to satisfied UL-94V-O as interface material.

AVAILABILITY:

CB8133 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) Keep product at room temperature for 15 minutes before using.
- (2) Cut or pre-cut to desired size and shape.
- (3) Place COOL-BOND between device and substrate or heatspreader or heat-sink.
- (4) If it is pre-applied onto substrate, heatsink, heatspreader or CPU, place onto parts that are heated above 135°C using nominal placement pressure.

COOL-BOND CB8133

TYPICAL PROPERTIES*

Electrical Resistivity <5X10 ⁻² ohm-cm

25 °C/ As is

Dielectric Strength (Volts/mil) >CONDUCTIVE

Glass Transition Temp.(°C) -55 ±10%

Lap-Shear Strength <600 psi

<4.1 N/mm²

Device Push-off Strength >400 psi

>5.5 N/mm²

Hardness (Type) <60 (A)

Cured Density (gm/cc) 4.5 ±10%

Thermal Conductivity >56 Btu-in/hr-ft²-°F ±10%

>8.0 W/m-°C ±10%

Linear Thermal Expansion 110 ±15%

Coeff. (ppm/°C)

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 manufacturing and in the final product.

Melt/Flow Conditions

 Temperature
 Time
 Pressure

 >135°C
 0.5 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

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PRODUCT DATA SHEET Ver 2.1 4/2/2018