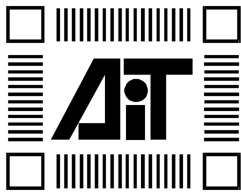

AI TECHNOLOGY INC
70 Washington Road
Princeton Jct., NJ 08550
(609) 799-9388 fax (609) 799-9308
E-Mail: ait@aitechnology.com
Internet: http://www.aitechnology.com

COOL-BOND
CB8130-XT

Medium Strength Adhesive
"Phase-Change" Dry Pad
Melt-Flow >200ºC @ <3 psi
Extra-High Thermal Conductivity
Extra-High Electrical Conductivity

IDEAL FOR:

- **Silicone Thermal Gasket Replacement**
- **Thermal Grease Replacement**
- **Medium Strength Reworkable Adhesive**

DESCRIPTION:

CB8130-XT is an enhanced thermal conductive version of CB8130. It is a silver filled, electrically conductive, medium bond strength adhesive It is designed to enhance thermal and electrical transfer from die/wafer to heat-sink during burn-in testing. CB8130-XT 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 medium bond strength is applicable up to 110ºC.

When a power device goes into operation and generates heat in excess of 190ºC, CB8130-XT will "melt" or "reflow" to form intimate interfaces between the contact surfaces and thus dramatically reduces the thermal and electrical impedance. It provides grounding and cooling for the heat generating devices.

AVAILABILITY:

CB8130-XT is available in sheet sizes or 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 conductive COOL-BOND between device and heat-sink.

(4) Clamp with suitable force of more than 3 psi. Device is now ready for service.

TYPICAL PROPERTIES*

Property	Value
Electrical Resistivity (25 ºC/ As is)	<2X10 $^{-4}$ ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(ºC)	-55 ±10%
Lap-Shear Strength	<ND <ND
Device Push-off Strength	>400 psi >2.8 N/mm²
Hardness (Type)	<45 (A)
Cured Density (gm/cc)	5.0 ±10%
Thermal Conductivity	>110 Btu-in/hr-ft²-ºF ±10% >16 W/m-ºC ±10%
Linear Thermal Expansion Coeff. (ppm/ºC)	110 ±15%
Maximum Continuous Operation Temp. (ºC)	<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

Temperature	Time	Pressure
>200ºC	0.5 sec	<3 psi
>130ºC	0.5 sec	>3 psi

SHELF LIFE:

Storage temperature	Shelf Life
0-5ºC	1 yr in sealed package

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.

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