



**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**  
**CB8250-E**

**In situ "Curing"**  
**Pressure Sensitive**  
**Electrically Conductive**  
**Film Adhesive**

**IDEAL FOR:**

- Component Attach
- Heat Sink Attach
- Substrate Attach

**DESCRIPTION:**

CB8250-E is a pressure sensitive, cross-linkable version of CB8130 designed to have improved bond strength at elevated temperature. CB8250-E is a silver filled, medium bond strength film adhesive. It is designed for bonding heat sinks, component, and substrate. CB8250-E has good thermal conductivity. As applied, it provides >300 psi bond strength that will improve to over 1000 psi in-situ over time.

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 25 °C/ 1s Place )	<5x10 <sup>-3</sup> ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(°C)	-55
Lap-Shear Strength	
Device Push-off Strength	>1000 psi >7.0 N/mm <sup>2</sup>
Hardness (Type)	<60 (A)
Cured Density (gm/cc)	3.5
Thermal Conductivity	>25 Btu-in/hr-ft <sup>2</sup> -°F >3.6 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	60
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:**

CB8250-E 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 to desired size. Remove one side of release liner from adhesive.
- ( 3 ) Place on substrate or component with rolling finger pressure, then remove the other release liner.
- ( 4 ) Place component on substrate with insertion pressure of 10 psi or more. More bond strength will develop in-situ over time during operation.

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
25°C	vs Applied	<15 psi
60°C	16 hr	
100°C	<60 min	
130°C	<5 min	
160°C	<1 min	

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
0-5°C	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 to MSDS 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 A.I. Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

While AI Technology owns all proprietary rights of material formulations of its products, specific usage in the manufacturing of certain products may involve patent rights of other companies.