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**COOL-BOND**  
**ME7656**

**Stress Free, Very High  
 Thermal Conductivity  
 Fast Curing Epoxy Paste  
 Insulating  
 Reworkable**

**IDEAL FOR:**

- High Power Die-Attach
- Power Module Substrate Attach
- High Power Component Attach

**DESCRIPTION:**

ME7656 is a reworkable, boron-nitride crystallite filled, electrically insulating and thermally conductive epoxy paste adhesive. It exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). The very high thermal conductivity of this material makes it useful for bonding high-powered, large area die and components.

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 150 °C/ 30 minute )	>1x10 <sup>14</sup> ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-10 ±10%
Current Carrying Capabilities	N/A
Lap-Shear Strength	N/A
Device Push-off Strength	>1200 psi >8.3 N/mm <sup>2</sup>
Hardness (Type)	80 (A) ±10%
Cured Density (gm/cc)	2.3 ±10%
Thermal Conductivity	25 Btu-in/hr-ft <sup>2</sup> -°F ±10% 3.6 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	120 ±15%
Maximum Continuous Operation Temp. (°C)	<150
Pot Life	
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1,spindle CP51)	200,000 cp ±20%
Thixotropic Index	

\* 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:**

ME7656 is available in syringes for automatic needle dispense applications or in jars.

**CURE SCHEDULES:**

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
80°C	8 hr	
100°C	4 hr	
125°C	2 hr	
150°C	1 hr	

**APPLICATION PROCEDURES:**

- ( 1 ) Thaw for 30 minutes before opening jar.
- ( 2 ) Dispense adhesive onto clean substrate.
- ( 3 ) Adhesive dots should be in cross-hatched pattern for large area bonding.
- ( 4 ) Cure according to one of the recommended schedules.

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
-40°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 SDS for more details.

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