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Stress Free

Thermally Conductive

Reworkable

Epoxy Paste Adhesive

IDEAL FOR:

High Power Die Attach

Substrate and Component

Reworkability

Mismatched CTE's

DESCRIPTION:

ME7155 is a medium bond strength, stress absorbing, thermally conductive adhesive paste. ME7155 exhibits outstanding flexibility for bonding materials having highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). The high thermal conductivity of this material makes it useful for bonding high-powered, large area die and components.

It can be readily reworked at 80-100°C.

AVAILABILITY:

ME7155 is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw for 30 minutes before opening jar..
- (2) Dispense adhesive onto clean substrate.
- (3) Pre-bake dispensed adhesive at 60°C for 30 to 60 minutes to achieve optimum bonding. Pre- bake not needed in all applications.**
- (4) Cure according to one of the recommended schedules.

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.

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.

PRODUCT DATA SHEET

PRIMA-BOND

ME7155

TYPICAL PROPERTIES*

Electrical Resistivity (150 °C/ 60 minute)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-25 ±10%
Current Carrying Capabilities	N/A
Lap-Shear Strength	>800 psi >5.5 N/mm ²
Device Push-off Strength	>1500 psi >10.3 N/mm ²
Hardness (Type)	80 (A) ±10%
Cured Density (gm/cc)	2.3 ±10%
Thermal Conductivity	12 Btu-in/hr-ft ² -°F ±10% 1.7 W/m-C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	130 ±15%
Maximum Continuous Operation Temp. (°C)	<150
Pot Life	
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1,spindle CP51)	275,000 cp ±20%
Thixotropic Index	

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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	

Viscosity updated in this current TDS version. Everything else remains the same.

SHELF LIFE:

<u>Storage temperature</u>	<u>Shelf Life</u>
-40°C	1 yr