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PRIMA-BOND

ME7155

Stress Free
Solvent Free
Thermally Conductive
Reworkable
Epoxy Paste Adhesive

IDEAL FOR:

High Power Die Attach

Substrate and Component

Reworkability

Mismatched CTE's

DESCRIPTION:

ME7155 is a reworkable, alumina filled, electrically insulating and thermally conductive epoxy paste adhesive. It exhibits not only outstanding flexibility for bonding materials having highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper), but also exhibits a high level of uniformity and consistency in appearance and smoothness of texture, yielding potential ease of use and success in applications. The high thermal conductivity of this material makes it useful for bonding high-powered, large area die and components.

ME7155 can be readily reworked at 80-150ºC. Meets Mil-Std 883; Method 5011.5 and NASA-ESA Outgassing Requirements***

AVAILABILITY:

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

APPLICATION PROCEDURES:

(1) Remove from freezer in original sealed package.

(2) Thaw for 30 to 60 minutes at 25ºC before using.

(3) Dispense adhesive onto clean substrate.

(4) Cure according to one of the recommended cure schedules.

TYPICAL PROPERTIES*

Electrical Resistivity (150 ºC/ 60 minute)	**>1x10 ^{14} ohm-cm**
Dielectric Strength (Volts/mil)	**>750**
Glass Transition Temp.(ºC)	**-25 ±10%**
Current Carrying Capabilities	**N/A**
Lap-Shear Strength	**>1000 psi**
	>6.9 N/mm²
Device Push-off Strength	**>1800 psi**
	>12.4 N/mm²
Hardness (Type)	**80 (A) ±10%**
Cured Density (gm/cc)	**2.3 ±10%**
Thermal Conductivity	**12 Btu-in/hr-ft²-ºF ±10%**
	1.7 W/m-ºC ±10%
Linear Thermal Expansion Coeff. (ppm/ºC)	**120 ±15%**
Maximum Continuous Operation Temp. (ºC)	**<150**
Avg. Viscosity(0.5 rpm, 25ºC) (Brookfield DV-1,Spindle CP51)	**275,000 cp ±20%**

* 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.

CURE SCHEDULES:

Temperature	Time	Presure
80ºC	8 hr	
100ºC	4 hr	
125ºC	2 hr	
150ºC	1 hr	

*** 24 Hour 125ºC or 150ºC vacuum or air flow oven post bake required to meet outgassing requirements

SHELF LIFE:

Storage temperature	Shelf Life
-40ºC	1 yr
Pot Life	5 Days @ 25ºC

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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