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COOL-BOND
ME7665-DA

Low Temperature Curing

Low Stress

Low Ionic, Insulating

Thermal Conductive

Epoxy Paste Adhesive

IDEAL FOR:

- Insulating Die-attach for Large and Small Die
- In-line Processing of Smaller Dies and Components
- Large and Small area power devices

DESCRIPTION:

ME7665-DA is a rapid curing dielectric die-attach thermal adhesive. It contains alumina crystallite of less than 3 micron in particle size. It is a fast curing insulating epoxy adhesive for snap-curing applications. This thixotropic (TI is approx. 4.0) paste is solvent free. It is designed for automated, online bonding processing.

ME7665-DA-LV is thermally conductive with less than 20 ppm ionic impurities. It can be dispensed with traditionally pressure-time or more accurately with positive volumetric dispenser. It has medium viscosity and high thixotropic index.

AVAILABILITY:

ME7665-DA is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw to ambient temperature for 30 minutes before opening jar or using syringes.
- (2) Dispense adhesive onto clean substrate with a suitable pattern to assure full die coverage.
- (3) Cure according to one of the recommended schedules.

TYPICAL PROPERTIES*

Electrical Resistivity (100 °C/ 10 minute)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	90 ±10%
Current Carrying Capabilities	NA
Lap-Shear Strength	N/A
Device Push-off Strength	>2,000 psi >13.8 N/mm ²
Hardness (Type)	90 (D) ±10%
Cured Density (gm/cc)	1.8 ±10%
Thermal Conductivity	6 Btu-in/hr-ft ² -°F ±10% 0.85 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	40 ±15%
Maximum Continuous Operation Temp. (°C)	<150
Pot Life	5 days at 25°C
Viscosity (5.0 rpm, 24°C) (Brookfield DV-1,spindle CP51)	20,000 cp (TI-3) ±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.

CURE SCHEDULES:

Temperature	Time	Pressure
85°C	60 min.	
100°C	30 min	
125°C	15 min	
150°C	5 min	

SHELF LIFE:

Storage temperature	Shelf Life
-40°C	1 yr
0°C	3 mo

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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