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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 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 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)	80
Current Carrying Capabilities	NA
Lap-Shear Strength	
Device Push-off Strength	>2,000 psi >13.8 N/mm ²
Hardness (Type)	90 (D)
Cured Density (gm/cc)	2.2
Thermal Conductivity	12 Btu-in/hr-ft ² -°F 1.7 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	40
Maximum Continuous Operation Temp. (°C)	150
Avg. Viscosity(5 rpm, 24°C) (Brookfield DV-1,spindle CP51)	20,000 cp

* 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:

<u>Temperature</u>	<u>Time</u>
85°C	2 hr
100°C	1 hr
125°C	30 min

SHELF LIFE:

<u>Storage temperature</u>	<u>Shelf Life</u>
-40°C	1 yr
0°C	6 mon

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