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Flexible

Moisture Resistant High Green Strength 100% Solid

Epoxy Paste Adhesive

IDEAL FOR:

"Low" Bleeding

Large Area Die Attach

High Temperature Wirebondable

Component Attach

Substate Attach

DESCRIPTION:

ME8650-RC is designed for needle dispensing and screen-printing processing. This silver filled conductive die-attach adhesive can be rapidly cured at low temperatures. This single component, silver filled paste is ambient storable electrically and thermally conductive. It is highly thixotropic with minimal sag.

ME8650-RC has been designed to minimize bleeding on both silver plated copper and alloy 42 leadframes. Maintains more than 100 psi bond strength at 250°C for wire-bonding.

AVAILABILITY:

ME8650-RC is available in syringes or in jars.

APPLICATION PROCEDURES:

- (1) Thaw for 30 min. 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 the recommended schedules.

ME8650-RC

TYPICAL PROPERTIES*

Electrical Resistivity <5x10⁻⁴ ohm-cm (150 °C/ 60 minute)

Dielectric Strength (Volts/mil) >Not Applicable
Glass Transition Temp.(°C) -20/-50 Minor ±10%
Current Carrying Capabilities 50 Amp/mm²

Lap-Shear Strength N/A

Device Push-off Strength >1500 psi

>10.3 N/mm²

Hardness (Type) 80 (A) $\pm 10\%$ Cured Density (gm/cc) 3.5 $\pm 10\%$

Thermal Conductivity >55 Btu-in/hr-ft²-°F ±10%

>7.9 W/m-°C ±10%

Linear Thermal Expansion 100 ±15%

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <150

Avg. Viscosity(5.0 rpm, 25°C) 18,000 cp ±20%

(Brookfield DV-1,spindle CP51)

CURE SCHEDULES:

| <u>Temperature</u> | <u>Ti</u> | <u>me</u> | <u>Presure</u> |
|--------------------|-----------|-----------|----------------|
| 80°C | 120 | min | |
| 100°C | 60 | min | |
| 125°C | 30 | min | |
| 150°C | 15 | min | |
| 175°C | 8 | min | |
| | | | |

Pot life: 25°C for >5 days.

SHELF LIFE:

| Storage temperature | Shelf Life |
|---------------------|------------|
| -40°C | 1 yr |
| 25°C | 30 day |

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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PRODUCT DATA SHEET Ver 2.0 4/2/2018

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