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Stress Free Reworkable **Electrically Conductive Epoxy Paste Adhesive**

IDEAL FOR:

Large Area Die **Substrate and Component** Reworkability Mismatched CTE's

DESCRIPTION:

ME8456-00 is a reworkable, pure silver filled, electrically and thermally conductive epoxy paste adhesive. It exhibits outstanding flexibility for bonding materials having highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper).

ME8456-00 can be readily reworked at 125°C or higher. It is ideal for applications such as large area die attach and substrate attach because of its ability to bond materials having highly mismatched CTE's.

AVAILABILITY:

ME8456-00 is available in syringes for automatic needle dispense applications or in jars.

APPLICATION PROCEDURES:

- (1) Thaw for 30 minutes before opening jar or using syringe.
- (2) Dispense adhesive onto clean substrate.
- (3) Pre-bake dispensed adhesive open face at 60°C for 60 minutes.
- (4) Cure according to one of the recommended cure schedules.

PRIMA-SOLDER ME8456-00

TYPICAL PROPERTIES*

Electrical Resistivity <4x10 -4 ohm-cm 125 °C/ 3 hr

Dielectric Strength (Volts/mil) N/A Glass Transition Temp.(°C) -20 ±10% **Current Carrying Capabilities** 35 Amp/mm²

Lap-Shear Strength >200 psi

>1.4 N/mm²

>1200 psi **Device Push-off Strength**

>8.3 N/mm²

80 (A) ±10% Hardness (Type) Cured Density (gm/cc) 4.0 ±10%

Thermal Conductivity 87 Btu-in/hr-ft2-9F ±10%

12.5 W/m-°C ±10%

Linear Thermal Expansion 120 ±15% Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <150

Pot Life

Avg. Viscosity(2.5 rpm, 25°C) 60,000 cp ±20%

(Brookfield DV-1, Spindle CP51) Thixotropic Index

CURE SCHEDULES:

<u>Temperature</u>	<u>Time</u>	<u>Pressure</u>
80°C	12 hr	
100°C	6 hr	
125°C	3 hr	
150°C	2 hr	

Pot Life is 5 days at 25°C

SHELF LIFE:

Storage temperature Shelf Life -40°C 1 yr

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 Al Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

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PRODUCT DATA SHEET Ver 2.1 3/14/2022

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