

Stress-Free One or Two Component Reworkable **Epoxy Paste Adhesive**

IDEAL FOR:

Large Area Die Substrate/Component Reworkability Mismatched CTE's Solder Replacement

DESCRIPTION:

EG8050-E is an electrically conductive, silver filled epoxy. It exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper).

It can be readily reworked at 80-100°C and is ideal for applications such as large area die attach and substrate attach because of it's ability to bond materials with highly mismatched CTE's.

AVAILABILITY:

EG8050-E is available in syringes for automatic needle dispense applications or in jars. Both viscosity and thixotropic index can be modified to your specific needs. EG8050-E can be premixed and frozen.

APPLICATION PROCEDURES:

- (1) Mix adhesive in 1:1 weight ratio. (Note: In kit form, Part A viscosity >>Part B viscosity)
- (2) Dispense adhesive onto clean substrate.
- (3) Cure according to one of the recommended schedules.

PRIMA-SOLDER EG8050-E

TYPICAL PROPERTIES*

<4x10 ⁻⁴ ohm-cm **Electrical Resistivity**

(150 °C/ 60 min

N/A Dielectric Strength (Volts/mil)

-20 ±10% Glass Transition Temp.(°C) 35 Amp/mm² **Current Carrying Capabilities**

Lap-Shear Strength

>600 psi >4.1 N/mm²

>1400 psi **Device Push-off Strength**

>9.7 N/mm² 4.0 ±10%

Cured Density (gm/cc) Thermal Conductivity

55 Btu-in/hr-ft2-°F ±10%

7.9 W/m-°C ±10%

Linear Thermal Expansion

120

Coeff. (ppm/°C)

Maximum Continuous Operation Temp. (°C) <130

Avg. Viscosity(0.5 rpm, 24°C)

180,000 cp ±20%

(Brookfield DV-1, spindle CP51)

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>
25°C	120 hr
80°C	8 hr
125°C	2 hr
150°C	1 hr

^{**}If material is premixed and frozen, thaw for 30 minutes and cure according to one of the recommended schedules.

SHELF LIFE:

Storage temperature

Shelf Life

25°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 2.0 4/2/2018

^{***}Shelf life is for unmixed components. If premixed: -40°C for 6 months. After mixing, pot life is 4 hours at 25°C.