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**Stress Free**  
**One or Two Component**  
**Hyper-Conductive**  
**Epoxy Paste Adhesive**

**IDEAL FOR:**

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

**DESCRIPTION:**

EG8050-HC is a more conductive version of EG8050 which 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 80-150°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-HC is available in syringes for automatic needle dispense applications or in jar. Both viscosity and thixotropic index can be modified to ones specific needs. EG8050-HC can be premixed and frozen.

**APPLICATION PROCEDURES:**

- ( 1 ) Mix adhesive in 1:1weight ratio.
- ( 2 ) Dispense adhesive onto clean substrate.
- ( 3 ) Cure according to one of the recommended cure schedules.

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

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**PRIMA-SOLDER**  
**EG8050-HC**

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 150 °C/ 60 min )	<b>&lt;9x10<sup>-5</sup> ohm-cm</b>
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(°C)	<b>-20 ±10%</b>
Current Carrying Capabilities	<b>35 Amp/mm<sup>2</sup></b>
Lap-Shear Strength	<b>&gt;750 psi</b> <b>&gt;5.2 N/mm<sup>2</sup></b>
Device Push-off Strength	<b>&gt;2500 psi</b> <b>&gt;17.2 N/mm<sup>2</sup></b>
Cured Density (gm/cc)	<b>4.0 ±10%</b>
Thermal Conductivity	<b>55 Btu-in/hr-ft<sup>2</sup>-°F ±10%</b> <b>7.9 W/m-°C ±10%</b>
Linear Thermal Expansion Coeff. (ppm/°C)	<b>120</b>
Maximum Continuous Operation Temp. (°C)	<b>&lt;130</b>
Avg. Viscosity(0.5 rpm, 25°C) (Brookfield DV-1, Spindle CP51)	<b>195,000 cp ±20%</b>

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**\*\*CURE SCHEDULES:**

<u>Temperature</u>	<u>Time</u>
25°C	120 hr
80°C	8 hr
100°C	4 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 is for unmixed components. If premixed: -40°C for 6 months. After mixing, pot life is 4 hours at 25°C.

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
25°C	***1 yr