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PRIMA-SOLDER
EG8050-HC

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 80-100°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-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. EG 8050-HC can be premixed and frozen.

APPLICATION PROCEDURES:

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

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

TYPICAL PROPERTIES*

Electrical Resistivity (150 °C/ 60 min)	<9x10 ⁻⁵ ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(°C)	-20
Current Carrying Capabilities	35 Amp/mm ²
Lap-Shear Strength	500 psi 3.4 N/mm ²
Device Push-off Strength	700 psi 4.8 N/mm ²
Cured Density (gm/cc)	4.0
Thermal Conductivity	55 Btu-in/hr-ft ² -°F 7.9 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	120
Maximum Continuous Operation Temp. (°C)	130
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1, spindle CP51)	192,000 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>
25°C	44 hr
80°C	4 hr
100°C	2 hr
125°C	1 hr
150°C	30 min

SHELF LIFE:

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

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

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