



**AI TECHNOLOGY INC**  
 70 Washington Road  
 Princeton Jct., NJ 08550  
 (609) 799-9388 fax (609) 799-9308  
 E-Mail: [ait@aitechnology.com](mailto:ait@aitechnology.com)  
 Internet: <http://www.aitechnology.com>

**PRIMA-SOLDER**  
**ME8456-GE**

- Stress Free**
- Reworkable**
- Electrically Conductive**
- B-Stageable**
- Epoxy Adhesive**

**IDEAL FOR:**

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

**DESCRIPTION:**

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

The adhesive must be pre-dried or B-Stage (60°C for 30-60 minutes) before bonding. Dried adhesive on substrate with ME8456-GE will perform similar to Tack-free film adhesive ESP8350.

**AVAILABILITY:**

ME8456-GE is available in syringes for automatic needle dispense applications or in jars. Both viscosity and thixotropic index can be modified to your specific needs.

**APPLICATION PROCEDURES:**

- ( 1 ) Store tightly sealed adhesive under refrigeration.
- ( 2 ) Thaw for 30 minutes before opening jar.
- ( 3 ) Dispense adhesive onto clean substrate.
- ( 4 ) Bake open face at 60°C for 30-60 minutes depending on thickness of adhesive.

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 150 °C/ 60 minute )	<5x10 <sup>-4</sup> ohm-cm
Dielectric Strength (Volts/mil)	N/A
Glass Transition Temp.(°C)	-25
Current Carrying Capabilities	35 Amp/mm <sup>2</sup>
Lap-Shear Strength	1000 psi 6.9 N/mm <sup>2</sup>
Device Push-off Strength	1800 psi 12.4 N/mm <sup>2</sup>
Hardness (Type)	80 (A)
Cured Density (gm/cc)	3.5
Thermal Conductivity	40 Btu-in/hr-ft <sup>2</sup> -°F 5.7 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	120
Maximum Continuous Operation Temp. (°C)	150
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1,spindle CP51)	100,000 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>
80°C	8 hr
100°C	4 hr
125°C	2 hr
150°C	30 min
200°C	5 min
300°C	10 sec

The die or component can also be tacked on the substrate at 80°C or higher with 5 psi. When a fillet around the edge of the die or component is observed, the pressure can be released for the rest of the bonding cycle.

**SHELF LIFE:**

<u>Storage temperature</u>	<u>Shelf Life</u>
-40°C	1 yr
0°C	3 mo

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