

## **TECHNICAL BULLETIN**

### EB-350M-7

### Fast Cure, Long Work Life Epoxy Adhesive for High Volume Assembly

**EB-350M-7** is a one component epoxy adhesive for bonding microelectronics components. It is designed for high volume assembly operations that require fast & fully cures in the length of one reflow oven, but is stable enough to be easily shipped and used in large volume cartridges (up to 20 oz).

**EB-350M-7** also only requires -20°C storage conditions to maintain shelf stability for more than 6 months. It has an exceptional work life and can be used over many days of production.

**EB-350M-7** was specifically formulated to eliminate anhydride type curing agents for those users who prefer to work with anhydride-free products.

### **TYPICAL HANDLING PROPERTIES:**

Epoxibond EB-350M-7 Viscosity @ 25°C, cps 65,000 – 75,000

Shelf life 1 month @ 25°C

6 months @ below -20°C

Cure Options:

Or

Or

<1 minute @ 180°C 3 minutes @ 165°C 5 minutes @ 175°C

# TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:

(Tested @ 25°C unless otherwise indicated)

Color	Black
Specific Gravity	1.55
Hardness, Shore D	90
Water Absorption (24 hrs at 25°C), %	0.03
Lap Shear Strength to Aluminum, psi	2700
Thermal Conductivity, W/m°K	0.8
Flexural Strength, psi	14,100
Flexural Modulus, psi	$0.8x10^6$
Service Temperature range, °C	-55 to 220
Glass Transition Temperature, °C	132
Coefficient of Linear Thermal Expansion, 10 <sup>6</sup> /°C	
Below Tg	52
Above Tg	172
Dielectric Constant at 1 kHz	4.5
Dissipation Factor at 1 kHz	0.01
Volume Resistivity, ohm-cm	$1 \times 10^{15}$

### **INSTRUCTIONS FOR USE:**

- 1. Use dispensing equipment for best results.
- 2. For small applications, apply the product using a syringe or clean spatula.
- 3. Avoid air entrapment to obtain optimum cured properties.
- 4. Proceed with the bonding application and cure as recommended.
- 5. Typical cured properties were determined using recommended cure schedule.
- Some difference in properties may occur with the alternate or other cure schedules.

### **FOR INDUSTRIAL USE ONLY:**

This material is intended for industrial use only, and the practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

### **WARNING!**

Although the system contains low volatility materials, care should be taken in handling. Adequate ventilation of work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Material Safety Data Sheet for additional health and safety information.