



## TECHNICAL BULLETIN

### EB-350-1LV-M2

### ONE COMPONENT, LOW VISCOSITY MACHINABLE, LOW EXPANSION ADHESIVE

**EB-350-1LV-M2** is a low viscosity, one component, filled, low coefficient expansion, epoxy adhesive. The cured adhesive provides excellent bond strength to ferrite, ceramics, wood, metals, and many engineering thermoplastics.

**EB-350-1LV-M2** is also useful for small potting and encapsulating densely packaged power supplies, integrated circuits, thick film hybrid devices, D/A converters, oscillators, amplifiers, relays, transformers and semiconductors etc.

#### TYPICAL HANDLING PROPERTIES:

Epoxybond	EB-350-1LV-M2
Viscosity @ 25°C, cps (RVT-7, 60 rpm)	15,000-30,000
Pot life at 80°C, minutes	20
Shelf life	3 months @ 25°C 4 months @ 10°C
Recommended Cure	1 hr/100°C + 1 hr/150°C
Alternate Cure	2 hrs/125°C
	Or 30 min/150°C
	Or 20 min/175°C

#### TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:

(Tested @ 25°C unless otherwise indicated)

Color	Black
Specific Gravity	1.5
Hardness, Shore D	91
Water Absorption (24 hrs at 25°C), %	0.09
Lap Shear Strength to Aluminum, psi	
At 25°C	2900
At 100°C	1800
Thermal Conductivity, W/mK	0.4
Flexural Strength, psi	12,400
Flexural Modulus, psi	1x10 <sup>6</sup>
Service Temperature range, °C	-55 to 175
Glass Transition Temperature, °C	120
Coefficient of Linear Thermal Expansion, 10 <sup>-6</sup> /°C	
Below Tg	32
Above Tg	140
Dielectric Constant at 1 kHz	4.5
Dissipation Factor at 1 kHz	0.01
Volume Resistivity, ohm-cm	1x10 <sup>15</sup>

#### 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 or potting application and cure as recommended.

#### 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.

#### SHELF LIFE:

The shelf life of this material is 4 months when stored in unopened containers below 10°C temperature. Storage at 0°C to 5°C will improve the shelf life of the product.