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## 123-01

## **B-STAGEABLE, THERMALLY CONDUCTIVE, EPOXY ADHESIVE**

**DESCRIPTION**: 123-01 is a B-Stageable, thermally conductive, epoxy adhesive. This product is designed for bonding of lead frames to PC boards and capacitors to lead frames. Other applications include, but are not limited to assembling electrical and electronic components. This system features excellent thermal stability and flexibility in the B-Staged form. 123-01 is a faster curing version of 122-50.

## **PROPERTIES:**

Viscosity (cps): 20.000-25.000 Filler Silver > 75 Percent Silver, cured Glass Trans. Temp. (°C) 95 Volume Resistivity (ohm-cm) 0.001 Solderable No Hydrolytic Stability Excellent Useful Temperature Range (°C) -55 to +230 Thermal Stability (°C) Good to 325 T-Shear Strength (psi) 1925

**SUGGESTED HANDLING AND CURING**: Material is ready to use as received. Store frozen to maintain consistent flow properties. Allow material to warm up to room temperature before opening container. As an adhesive, apply the 123-01 to one or both parts, then mate the parts and cure for 30 minutes at 160°C, or 15 minutes at 175°C, or 5 –10 minutes at 200°C while maintaining pressure. 123-01 can be thinned with small amounts of CMI# 113-12 (fast drying), or CMI #102-03 (slow drying) thinners.

**STORAGE**: Shelf Life - 1 week @ 25°C; or 3months @ -10°C.

**B-STAGE PROCEDURE**: Apply adhesive to substrate. Next apply heat to advance the cure to the non-tacky stage when cooled to room temperature. A temperature of 125°C for 2-3 minutes is required. B-stage time is mass related. User is encouraged to experiment for optimum drying time at a given temperature. Store on release liner to prevent contamination.

**BONDING PROCEDURE:** To use, carefully align parts to be bonded, apply uniform pressure to maintain location. Cure for 5-10 minutes at 200°C, 15 minutes at 175°C, or 30 minutes at 160°C. (Note cure times given are mass related, timing should start after adhesive and substrates reach curing temperature.)

**SAFETY AND HANDLING**: Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to results or possible infringements on patents.

**REVISION DATE: 1/24/03 REVISION: A**