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## 123-32

### **PAD-PRINTABLE, B-STAGEABLE, ELECTRICALLY CONDUCTIVE, EPOXY ADHESIVE**

**DESCRIPTION:** 123-32 is a pad-printable, B-Stageable, electrically conductive, one part epoxy adhesive, that has been pre-catalyzed with CMI 119-44 to allow for low temperature cure. It is suitable for application by pad printing, dipping and syringe dispensing. This product is designed for die attachment, surface mount applications, and bonding capacitors to lead frames; other applications include, but are not limited to assembling electrical and electronic components. This system features excellent thermal stability and high temperature properties. 123-32 is a pre-catalyzed version of 118-06.

#### **PROPERTIES:**

Viscosity (cps)	10,000-12,000
Filler	Silver
Percent Silver, cured	> 74
Glass Trans. Temp. (°C)	100
Volume Resistivity, max. ( $\Omega$ -cm)	0.0008
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-55 to +230
Thermal Stability (°C)	Good to 325
T-Shear Strength (psi)	2100

**SUGGESTED HANDLING:** 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. 123-32 can be thinned with small amounts of CMI# 113-39 (fast drying), or #114-20 (slow drying) thinners. To use as an adhesive, apply the 123-32 to one or both parts, then mate the parts while maintaining uniform pressure.

#### **CURE SCHEDULE:**

4 hours at 80°C,	or	1 hour at 125°C, or
2 hours at 100°C,	or	30 minutes at 150°C

**PRODUCT STORAGE:** Shelf Life: 1 week at 25°C; or 6 months at -40°C

\* **Please note: 123-32 packaged in syringes must be kept frozen at -10°C or below.**

**B-STAGE PROCEDURE:** Apply adhesive to substrate. Next apply heat to advance the curing to the non-tacky stage when cooled to room temperature. A temperature of 125°C for 1-2 minutes is recommended. 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.

**STORAGE B-STAGED FILM:** Shelf Life - 2 days @ 25°C; or 3 months @ -10°C

**BONDING PROCEDURE:** To use, carefully align parts to be bonded, apply uniform pressure to maintain location. Cure per above cure schedule. (Note: Cure time starts when adhesive and substrates reach desired cure 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: 6/15/05 REVISION: B