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**126-37**

**SCREEN-PRINTABLE B-STAGEABLE ANISOTROPIC CONDUCTIVE LOW CTE EPOXY ADHESIVE**

**DESCRIPTION**

126-37 is a screen-printable, B-Stageable, anisotropic conductive, one part epoxy adhesive, suitable for application by screen-printing and syringe dispensing. 126-37 is designed to exhibit minimal flow during bonding. This product provides superior electrical conductivity when bonding circuit materials to metal back planes and heat sinks. This product has excellent adhesion to aluminum, ceramic, and a variety of other substrates. Additional 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. 126-37 is an anisotropic conductive version of 125-22.

**UNIQUE FEATURES**

- \* Minimal flow during cure
- \* B-Stageable
- \* Excellent Chemical Resistance
- \* Low CTE
- \* Long Screen Life
- \* Excellent High Temperature Performance

**TYPICAL UNCURED PROPERTIES**

Property	Value	Units
Viscosity – Brookfield HAT Viscometer, 10 rpm @ 25°C	20,000 – 25,000	cps
Specific Gravity (water = 1)	1.16	g/cc
Theoretical Coverage @ 0.001" Thickness <sup>1</sup>	~52	in <sup>2</sup>
Screen Life	> 8	hrs

<sup>1</sup> Dependent on screen mesh and material

**TYPICAL CURED PROPERTIES**

Property	Value	Units
Volume Resistivity (X,Y Axis)	1x10 <sup>12</sup>	Ω – cm
Volume Resistivity (Z Axis)	0.0001	Ω – cm
Thermal Stability	Good to +325	° C
Useful Temperature Range	-55 to +230	° C
Glass transition Temperature – Tg	150	° C
Coefficient of Thermal Expansion - Below Tg	50 x 10 <sup>-6</sup>	in/in/°C
- Above Tg	60 x 10 <sup>-6</sup>	in/in/°C
Tensile Shear Strength, min	2,000	Psi

**HANDLING AND STORAGE**

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. It is important to resuspend any settled filler before using. Be careful not entrap air while mixing. 126-37 can be thinned with small amounts of thinners 120-08 (quickest drying), 113-12, or 102-03 (slowest drying).

## SHELF LIFE

Storage Temperature	Containers	B-Staged Film
25°C	1 month	1 month
-10°C	6 months	3 months

## B-STAGE PROCEDURE

Apply adhesive to substrate or release liner. Next apply heat to advance the curing to the non-tacky stage when cooled to room temperature. A temperature of 80°C to 100°C for 2 to 5 minutes is recommended but B-stage time is mass related. User is encouraged to experiment for optimum drying time at a given temperature.

## BONDING PROCEDURE

To use, apply b-staged adhesive to one part, carefully align parts to be bonded, apply uniform pressure to maintain location and ensure intimate contact of the conductive filler. Cure for one of the recommended curing times or experimentally determine the optimal cure time and temperature for your application. For better adhesion of the b-staged film to the first part, it is suggested to warm the part to 40°C. Cure times given are mass related, timing should start after adhesive and substrates reach curing temperature.

## CURING GUIDELINES

Temperature (°C)	Time (min.)	
100	90	These temperatures and times are presented as a guide only. The end-user is encouraged to experiment to determine optimum curing schedule.
125	60	
150	30	
175	15	

## HEALTH AND SAFETY

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: 08/30/17 REVISION: B

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