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122-21

B-STAGED, THERMALLY CONDUCTIVE, TRANSFERABLE, EPOXY ADHESIVE FILM

DESCRIPTION: 122-21 is a B-staged, thermally conductive, electrically insulating, epoxy film. Some applications for 122-21 include, but are not limited to, adhesives, printed circuit board fabrication, advanced material composites, sealing and high performance coatings. This system features excellent thermal stability and high temperature properties. This product has been formulated to have improved handleability in the B-staged form, outstanding chemical resistance and excellent high temperature properties. 122-21 is a 5-mil thick version of CMI 119-25 film.

PHYSICAL DATA:

Coef. of Therm. Exp.(in/in/°C x 10 ⁻⁶)	41
Thermal. Cond. (Btu/hr°F-ft ² /ft)	0.45
Substrate Type	Release Liner
Adhesive Thickness (mils)	5.0
Volume Resistivity (Ω-cm)	1 x 10 ¹⁶
Useful Temperature Range (°C)	-55 to 200
Lap Shear Strength (psi)	1800(Min.)
Dielectric Strength (volts/mil)	425
Dielectric Constant	4.0

STORAGE: Shelf Life: 12 months at -40°C (*).

* Avoid flexing film if stored at -40°C.

APPLICATION AND CURING PROCEDURES ON NEXT PAGE

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: 12/5/01 REVISION: A



PROCEDURE FOR APPLYING 122-21

- 1) As with all adhesive bonds, surface preparation is a vital part of the process. Carefully clean both surfaces to be bonded with MEK if possible. If MEK is not compatible with the surfaces to be bonded, another suitable solvent may be used.
- 2) Allow cleaned surfaces to dry completely.
- 3) Cut 122-21 to the of the size of interface area, remove one of the protective liners, position onto one of the surfaces to be bonded, and warm the substrate/adhesive to 70°C
- 4) By applying slight pressure, laminate the film/adhesive to the substrate smoothing out any trapped air. Allow to cool to room temperature and peel off the other release liner.
- 5) Position the other substrate and apply a clamp to provide constant pressure.
- 6) Cure for 1 hour at 150°C.
- 7) Remove pressure. Part is ready for use.