

## BONDFILM ECF 9001

### EPOXY FILM ADHESIVES

BondfilmECF 9001 is an unsupported silver filled epoxy adhesive film that is electrically conductive in x, y and z axis. It can be useful for RF/EMI shielding, heat-sink applications and hybrid microelectronic substrate attach. It offers uniform adhesive bondlines with little or no squeeze out.

### ADHESIVE PROPERTIES

<b>Color</b>	Silver Grey
<b>Work Life @ 25°C</b>	14 days
<b>Cure Options</b>	30 minutes @ 150°C or 1 hour @ 125°C
<b>Service Temperature Range</b>	-40°C to 175°C
<b>Lap Shear Strength @ 25°C (Al to Al)</b>	3000 psi
<b>@ 25°C (Au to Au)</b>	3000 psi
<b>@ 150°C (Al to Al)</b>	700 psi
<b>Electrical Resistance</b>	0.009 ohm/.5 in <sup>2</sup> (Measured through bonded gold joints)
<b>Glass Transition Temperature</b>	112°C
<b>Weight Loss on Curing</b>	0.15%
<b>Weight Loss @ 300°C</b>	0.40%
<b>Coefficient of Thermal Expansion**</b>	
<b>Below Tg</b>	54 x 10 <sup>-6</sup> in/in/°C
<b>Above Tg</b>	156 x 10 <sup>-6</sup> in/in/°C
<b>Shelf Life</b>	6 months @ 5°C
<b>Availability</b>	3 to 6 mil thicknesses

Adhesive properties are not intended to be used as specification limits.

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### INSTRUCTIONS

Bondline ECF 9001 is an unsupported film adhesive and requires careful handling to avoid flexing and stretching while frozen.

1. Parts to be bonded need to be preheated to 40°C.
2. Remove release paper from one side of the film adhesive and place film on the warmed (40°C) part.
3. Remove any air voids between the adhesive film and the warmed part by softly pressing any voids under the release paper.
4. Allow part to cool to temperature.
5. Remove the release paper and attach the top part.
6. Apply 10 psi continuous pressure during cure.

### AVAILABILITY

Bondfilm ECF 9001X epoxy film is available in sheet stock and die cut preforms. Die cut preforms are cut to customer specifications. Width and length tolerances are  $\pm .005$  inch. Thickness tolerance  $\pm .001$  inch.

### STORAGE LIFE

Storage life is 6 months @ 5°C.

### TECHNICAL SERVICE CONTACT

For recommendations and help with any aspect of adhesive applications please contact the Bondline Technical Service Department (408) 830-9200, or via email: [info@bondline.net](mailto:info@bondline.net) or visit our website, [www.bondline.net](http://www.bondline.net)

**CAUTION: For industrial use only. People with sensitive skin may have a reaction to this adhesive. Avoid skin contact. Wash all areas with soap and water immediately if contact does occur. It is important to refer to Safety Data Sheet (SDS) OSHA for more details.**

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