CE-3126



PRODUCT DESCRIPTION

CE-3126 provides the following product characteristics:

| Technology | Ероху |
|------------------|--|
| Appearance | Black |
| Cure | Heat cure |
| Product Benefits | Snap curable |
| | Low temperature cure |
| | Anisotropic electrically conductive |
| | Low viscosity |
| Application | Conductive adhesive |
| Substrates | Copper, Gold and Aluminum |

CE-3126 snap curable anisotropic adhesive is especially suited in applications where throughput is critical. This product is typically used for very fine pitch flip chip interconnections where electrical conductivity is desired in only one direction. This material can be spot cured at temperatures as low as 170 °C, making it ideal for use with temperature sensitive substrates and components.

TYPICAL PROPERTIES OF UNCURED MATERIAL

| Viscosity at 15 S ⁻¹ , Rheometer | 16,300 |
|--|--------|
| Work Life, days | 2 |
| Shelf Life @ -40°C, months | 6 |
| Flash Point - See MSDS | |

TYPICAL CURING PERFORMANCE Cure Schedule

8 seconds @ 170°C

The recommended cure conditions for CE-3126 depend on the bondline temperature used. When the bondline temperature is raised to 170°C, 8 seconds are sufficient to cure the adhesive. The pressure needed during cure is strongly related to the exact deisgn set-up. The optimum pressure is best determined for each new design.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties:

| Coefficient of Thermal Expansion, ppm/°C: | |
|---|-----|
| Below Tg | 45 |
| Above Tg | 225 |
| Glass Transition Temperature ,DMA, °C: | |
| Storage Modulus, °C | 114 |
| Peak Tan, °C | 144 |
| | |
| Modulus @ 25°C, GPa | 2.3 |
| | |

TYPICAL PERFORMANCE OF CURED MATERIAL

| Miscellaneous: | |
|-----------------------------|--|
| Die Shear Strength: | |
| 50 x 50 milSi die to Al. Ka | |

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March 2009

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

DIRECTIONS FOR USE

- Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part
- 2. Apply adhesive to all surfaces to be bonded and join together
- 3. In most applications only contact pressure is required

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: -40 °C

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm $\ge 25.4 =$ V/mil mm / 25.4 = inches N $\ge 0.225 =$ lb N/mm $\ge 5.71 =$ lb/in N/mm² $\ge 145 =$ psi MPa $\ge 145 =$ psi N·m $\ge 8.851 =$ lb·in N·m $\ge 0.738 =$ lb·ft N·mm $\ge 0.738 =$ lb·ft N·mm $\ge 0.142 =$ oz·in mPa·s = cP



Note

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Reference 0.1