

Epoxy Technology EPO-TEK® E3037 Epoxy

Category : Polymer , Thermoset , Epoxy

Material Notes:

Material Description: A single component, electrically conductive, thixotropic silver-filled epoxy for die-attach and SMD-attach inside hybrid microelectronics. Information Provided by Epoxy Technology

Order this product through the following link:

http://www.lookpolymers.com/polymer_Epoxy-Technology-EPO-TEK-E3037-Epoxy.php

| Physical Properties | Metric | English | Comments |
|---------------------|--|--|----------|
| Specific Gravity | 3.07 g/cc | 3.07 g/cc | |
| Particle Size | <= 20 µm | <= 20 µm | |
| Viscosity | 22000 - 26000 cP @Temperature 23.0 °C | 22000 - 26000 cP @Temperature 73.4 °F | 10 rpm |

| Mechanical Properties | Metric | English | Comments |
|-----------------------|-------------|-------------|----------|
| Hardness, Shore D | 80 | 80 | |
| Tensile Modulus | 5.0172 GPa | 727.68 ksi | Storage |
| Shear Strength | 13.0 MPa | 1880 psi | Lap |
| | >= 23.4 MPa | >= 3400 psi | Die |

| Thermal Properties | Metric | English | Comments |
|----------------------------------|--------------|------------------------------------|---|
| CTE, linear | 52.0 µm/m-°C | 28.9 µin/in-°F | Below Tg |
| | 148 µm/m-°C | 82.2 µin/in-°F | Above Tg |
| Thermal Conductivity | 1.59 W/m-K | 11.0 BTU-in/hr-ft ² -°F | |
| Maximum Service Temperature, Air | 200 °C | 392 °F | Continuous |
| | 300 °C | 572 °F | Intermittent |
| Minimum Service Temperature, Air | -55.0 °C | -67.0 °F | Continuous |
| | -55.0 °C | -67.0 °F | Intermittent |
| Glass Transition Temp, Tg | >= 90.0 °C | >= 194 °F | Dynamic Cure 20–200°C /ISO 25 Min; Ramp -10–200°C @ 20°C/Min |
| Decomposition Temperature | 358 °C | 676 °F | Degradation Temperature |

| Electrical Properties | Metric | English | Comments |
|-----------------------|-------------------|-------------------|----------|
| Volume Resistivity | <= 0.00050 ohm-cm | <= 0.00050 ohm-cm | |

| Chemical Properties | Metric | English | Comments |
|----------------------------------|---------|---------|----------|
| Ionic Impurities - Na (Sodium) | 22 ppm | 22 ppm | |
| Ionic Impurities - K (Potassium) | 3.0 ppm | 3.0 ppm | |
| Ionic Impurities - Cl (Chloride) | 187 ppm | 187 ppm | |

| Processing Properties | Metric | English | Comments |
|-----------------------|-------------------------------------|-------------------------------------|----------|
| Cure Time | 60.0 min @Temperature 150 °C | 1.00 hour @Temperature 302 °F | minimum |
| Pot Life | 40320 min | 40320 min | |
| Shelf Life | 12.0 Month @Temperature -40.0 °C | 12.0 Month @Temperature -40.0 °F | |

| Descriptive Properties | Value | Comments |
|------------------------|----------------------|----------|
| Color | Silver | |
| Consistency | Smooth flowing paste | |
| Ionic Impurities NH4 | 65 ppm | |
| Number of Components | Single | |
| Thixotropic Index | 3.62 | |
| Weight Loss | 0.13% | 200°C |
| | 0.41% | 250°C |
| | 0.8% | 300°C |

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China