5070 Epoxy



A low viscosity, optically clear epoxy

5070 is an electrically isolating epoxy that bonds well to most substrates such as metals, glass, ceramics, and most plastics. The material is free flowing for potting and underfill applications. With a refractive index of 1.54, it is ideal for optics applications.

This product will exotherm if cured at high temperatures in masses greater than 5 grams. Contact Appli-Tec for step cure instructions if curing in larger masses.

| UNCURED | |
|-----------------------------|---------------------------------|
| Refractive Index | 1.54 |
| Viscosity, Mixed, @ 25°C | 640 cPs |
| Pot Life @ 25°C | 3 hours |
| Work Life @ 25°C | 6 hours |
| Shelf Life | 12 months @ -40°C (Cryo-Pac®) |
| CURE OPTIONS | 6 hours @ 80°C 2 hours @ 93°C |
| CURED PROPERTIES | Based on cure of 2 hours @ 93°C |
| Color | Clear |
| Shore D Hardness | 85 |
| Glass Transition Temp (°C) | 80 |
| Lap Shear 2024T3 Clad (psi) | 4,340 |
| Density (g/cc) | 1.17 |
| ELECTRICAL PROPERTIES | Based on cure of 2 hours @ 93°C |
| Dielectric Constant | 3.48 @ 1 MHz |
| Dissipation Factor | 0.0032@1MHz |
| Dielectric Strength | 731 V/mil |
| Volume Resistivity (ohm-cm) | 2.8E 16 @ 500 VDC |
| THERMAL PROPERTIES | Based on cure of 2 hours @ 93°C |
| Glass Transition Temp (°C) | 80 |
| Operating Temp. Range (°C) | -50 to 150C |
| OUTGASSING PROPERTIES | Based on cure of 2 hours @ 93°C |
| TML (%) | 0.78 |
| CVCM (%) | 0.08 |
| WVR (%) | 0.32 |
| ACOUSTIC PROPERTIES | Based on cure of 2 hours @ 93°C |
| Velocity (m/s) | 2,513 |
| Impedance (MRayls) | 2.929 |
| Loss (dB/cm-MHz) | -8.37 |
| Density (g/cc) | 1.17 |

| KEY FEATURES |
|--------------------------------|
| Bonds Well to Most Substrates |
| Ideal for Optics Applications |
| Optically Clear |
| Low Outgassing |
| Long Work Life |
| Low Viscosity |
| Wicks Easily into Tight Spaces |
| Potting & Encapsulation |
| User-friendly Packaging |
| √ RoHS Compliant |

Chat with a specialist:

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