## 5302 Epoxy



## 1.85 W/mK

Appli-Tec 5302 epoxy was designed specifically for potting circuit board connectors. With its 4-hour pot life, the material is ideal for automated dispensing and features controlled flow – making it easy to deposit. 5302 meets NASA's outgassing requirements and has a wide range of curing options. The material bonds well with most substrates.

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                        |                                  |
|--------------------------------|----------------------------------|
| Pot Life @ 25°C                | 4 hours                          |
| Viscosity @ 25°C               | 125,000 cPs                      |
| Shelf Life @ -40°C             | 12 Months                        |
| Color                          | Blue                             |
| Thixotropic Index              | 1.9                              |
| CURE OPTIONS                   | 1 hour @ 120°C 5 minutes @ 150°C |
| CURED PROPERTIES               | Based on cure of 1 hour @ 120°C  |
| Color                          | Dark Tan                         |
| Shore D Hardness               | 97                               |
| Glass Transition Temp. (°C)    | 134                              |
| Density (g/cc)                 | 2.62                             |
| Lap Shear 2024T3 Clad (psi)    | 2,500                            |
| ELECTRICAL<br>PROPERTIES       |                                  |
| Volume Resistivity (ohm-cm)    | 2.13E 16 @500 VDC                |
| THERMAL PROPERTIES             | Based on cure of 1 hour @ 120°C  |
| Glass Transition Temp. (°C)    | 134                              |
| Thermal Conductivity<br>(W/mK) | 1.85                             |
| Degradation Temp. (°C)         | 275                              |
| OUTGASSING<br>PROPERTIES       | Based on cure of 1 hour @ 120°C  |
| TML (%)                        | 0.07                             |
| CVCM (%)                       | <0.01                            |
| WVR (%)                        | 0.04                             |
| ACOUSTIC<br>PROPERTIES         |                                  |
| Velocity (m/s)                 | 3,450                            |
| Impedance (MRayls)             | 9.03                             |
| Loss (dB/cm-MHz)               | -8.3                             |
| Density (g/cc)                 | 2.62                             |

|      | KEY FEATURES   |
|------|--|
|      | High Thermal Conductivity                            |
|      | Resistant to Fuel, Lubricants, Water, and<br>Weather |
|      | Bonds Well to Most Substrates                        |
|      | Can Be Used for Potting & Encapsulation              |
|      | Changes Color When Cured                             |
|      | Snap Cure at 150 °C                                  |
|      | High Glass Transition Temperature                    |
|      | High Temperature Resistant                           |
|      | Long Pot Life  |
|      | Meets NASA Outgassing Requirements                   |
|      | User-friendly Packaging                              |
|      | √RoHS Compliant                                      |
| Cha  | at with a specialist:                                |
| ser  | vice@appli-tec.com                                   |
| 603  | 3-685-0500 ext. 526                                  |
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