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## GPC 251

### ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE

**DESCRIPTION:** GPC 251 is a two-part, room temperature curing, silver filled epoxy adhesive. This system is designed for making electrical and mechanical attachments on electrical components and devices. Unlike typical room temperature curing systems, this product always results in excellent conductivity and is less sensitive to handling and ambient conditions. Complimentary B components allow for customization of end properties, use B2612 for more flexibility and lower stress, use the standard B component for high strength requirements.

|                        | <u>GPC-251A/B</u>  | <u>GPC-251A/B2612</u> |
|------------------------|--------------------|-----------------------|
| Appearance:            | Silver             | Silver                |
| Consistency:           | Paste              | Paste                 |
| Mix Ratio (by weight): | 100 / 5.9 (17 / 1) | 100 / 100 (1 / 1)     |
| Pot Life:              | 60 minutes         | 60 minutes            |

#### TYPICAL CURED PROPERTIES:

|                                  |             |             |
|----------------------------------|-------------|-------------|
| Volume Resistivity, max. (25°C)  | 0.005 Ω-cm  | 0.005 Ω-cm  |
| Volume Resistivity, max. (120°C) | 0.0002 Ω-cm | 0.0002 Ω-cm |
| Tensile Shear (psi)              | >1,800      | >1,200      |
| Water Absorption (%)             | <0.06       | <0.07       |
| Tensile Strength (psi)           | 11,200      | 8,800       |
| Solvent Resistance               | Excellent   | Excellent   |
| Solderable                       | No          | No          |
| Specific Gravity                 | 2.7         | 3.16        |
| Thermal Conductivity (W/m-K)     | 6.74        | 7.81        |

**MIXING INSTRUCTIONS:** Premix Part A in original container prior to adding curing agent. Add Part B to Part A and mix until uniform.

**CURING INSTRUCTIONS:** Best results are obtained when product is cured at one of the following schedules:

24 hours @ 25°C, or  
60 mins @ 65°C, or  
30 mins @ 95°C, or  
5 mins @ 120°C

End user is advised to experimentally determine temperature and time best suited for individual applications.

**STORAGE:** Shelf life Parts A and B: 12 months at 25°C in unopened, unmixed containers.

*All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to results or possible infringements on patents.*

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