

# 40-3901

## ELECTRICALLY CONDUCTIVE EPOXY ADHESIVE

### DESCRIPTION:

40-3901 is a two component epoxy adhesive filled with silver. This electrically conductive epoxy resin formulation offers an easy one to one mix ratio that cures at room temperature.

40-3901 is designed for adhesive bonding in microelectronic and optoelectronic applications. Due to its excellent continuity of conductivity, it has also been used extensively in applications such as micro-wave EMI and RFI shielding, in the assembly or repair of printed circuit boards, wave guides, electronic modules, flat cable, high frequency shields, connectors, circuitry, and as a cold solder.

40-3901 is formulated with pure silver (no alloys). Both the resin and hardener have silver particles dispersed.

### FEATURES:

- Electrically conductive
- Thermally conductive
- Room temperature cure
- Easy 1:1 mix ratio
- Good bond strength

### TYPICAL SPECIFICATIONS:

|                                  |  |
|----------------------------------|--|
| Mix Ratio, by Weight             | 1:1  |
| Color                            | Silver   |
| Mixed Viscosity                  | Creamy Paste   |
| Pot Life, 100 gram mass @ 25°C   | 1 Hour   |
| Specific Gravity, 25°C           |  |
| Resin                            | 3.1  |
| Hardener                         | 1.8  |
| Hardness, Shore D                | 70   |
| Thermal Conductivity, W/m- °K    | 7.93   |
| Tensile Lapshear, psi (Al to Al) | 700  |
| Flexural Strength, psi           | 10,200   |
| Volume Resistivity, ohm-cm       | $6 \times 10^{-3}$   |
| Operating Temp. Range, °C        | -35 to +135  |
| Cure Schedule                    | a) 24 hours @ 25°C<br>b) 1 hour @ 65°C<br>c) 15 minutes @ 90°C |



### **STORAGE AND HANDLING:**

40-3901 Resin and hardener should be stored at 25°C in original tightly sealed containers. Expected shelf life is twelve months in original unopened containers.

Filler settling is common with these products. Gently stir resin and hardener before using to make sure fillers are evenly dispersed.

### **IMPORTANT:**

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