



# 40-3906

## Fast Curing Silver Filled Epoxy

### DESCRIPTION:

40-3906 is a fast curing thin film adhesive. This silver filled epoxy adhesive is designed for applications requiring low temperature cures. Within ninety minutes 40-3906 is thin film set and within six hours is close to full hardness. It is solvent free and filled with unique silver particles.

40-3906 may be used as a repair material for electrical traces providing better chemical resistance and adhesion than conductive inks. Other common applications for 40-3906 include solder replacement, EMI/RFI shielding, grounding, die attach, SMD attach, and flip chip attachments.

### FEATURES:

- Fast thin film set time
- Room temperature cure
- Good bond strength
- Good chemical resistance to JP8, DI water, deicing fluids, and many organic solvents
- High thermal conductivity
- Excellent corrosion resistance

### TYPICAL SPECIFICATIONS:

Mix ratio, by weight (Resin:Catalyst)	100:4.7
Pot life, 50 gram mass @ 25°C	30 Minutes
Mixed viscosity	Thixotropic paste
Slump, 75°F, 30 minutes	0.3"
Linear shrinkage, in/in	.003
Hardness, Shore D	
6 hours	76
24 Hours	85
Specific gravity, 25°C	
Resin	3.23
Hardener	1.0
Tensile lap shear, psi (Al to Al)	750
Flexural strength, psi	10,900
Thermal conductivity, W/m- °K	8.65
Thermal expansion coefficient, per °C	26x10 <sup>-6</sup>
Operating temperature range, °C	60 to +135

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Volume resistivity, ohm-cm	
6 Hours @ 25°C	.0020
24 Hours @ 25°C	.0015

**INSTRUCTIONS FOR USE:**

- 1) All surfaces to be bonded or coated should be completely cleaned and grease free.
- 2) By weight thoroughly mix 4.7 parts 40-3906 Catalyst to 100 parts 40-3906 Resin (pre-weighed kits eliminate the need to weigh components).
- 3) Cure according to one of the following cure schedules:

- A) 25°C      18-24 Hours
- B) 65°C      2-3 Hours

**AVAILABILITY:**

40-3906 is available in bulk, pre-weighed kits, and hinge packs.

**STORAGE AND HANDLING:**

40-3906 epoxy 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 before using to make sure fillers are evenly dispersed.

**IMPORTANT:**

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