EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

40-3900
SILVER FILLED EPOXY RESIN

DESCRIPTION:

40-3900 is a two component epoxy adhesive filled with pure silver. This electrically conductive epoxy resin formulation offers the maximum in continuity of conductivity with an electrical resistivity value of less than $1x10^{-4}$ ohm-cm. 40-3900 is also well known for its' wide operating temperature range, -50 to + 170°C.

40-3900 is specifically designed for chip bonding in microelectronic and optoelectronic applications. Due to its' excellent continuity, 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.

40-3900 is formulated with pure silver (no alloys) and is designed in a convenient 1:1 mix ratio. Both the resin and hardener have silver powder dispersed.

TYPICAL SPECIFICATIONS:

Mix Ratio, by Weight	1:1
Color	Silver
Mixed Viscosity	Creamy Paste
Pot Life, 100 gram mass @ 25°C	3 Hours
Specific Gravity, 25°C/25°C	2.80
Tensile Strength, psi	9,450
Hardness, Shore D	70
Compressive Strength, psi	14,000
Heat Distortion Temp., °C	95
Thermal Conductivity, BTU/hr/ft2/ F/in.	100
Thermal Expansion Coefficient, C	25 x 10^{-6}
Volume Resistivity, OHM-CM	.0001
Operating Temp. Range, °C	$^{-}$50 to $^{+}$170
Cure Schedule	a) 24 hrs. @ 25°C b) 1 hour @ 65°C c) 15 minutes @ 90°C

IMPORTANT:
The information in this brochure is based on data obtained by our research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.

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