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**Product  
Bulletin**

**800-1100**

## **E-SHIELD MICROSORB EC-1100**

### **GENERAL DESCRIPTION**

#### **Two-Component Electrically Conductive Epoxy Adhesive**

#### **APPLICATION**

**E-SHIELD EC-1100** 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.

**E-SHIELD EC-1100** 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  $1 \times 10^{-4}$  ohm-cm.

**E-SHIELD EC-1100** is also well known for its' wide operating temperature range of -50 to + 170°C (-58°F to +338°F).

**E-SHIELD EC-1100** 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/ft <sup>2</sup> /°F/in.:	100
Thermal Expansion Coefficient, °C:	25 x 10 <sup>-6</sup>
Volume Resistivity, OHM-CM:	0.0001
Operating Temp. Range, °C:	-50 to +170
Cure Schedule	
Options:	1) 24 hrs. @ 25°C (77°F) 2) 1 hour @ 65°C (149°F) 3) 15 minutes @ 90°C (194°F)

### **INSTRUCTIONS FOR USE:**

- 1) All surfaces to be bonded or coated should be completely cleaned and grease free.
- 2) By weight thoroughly mix parts 1:1.
- 3) Cure according to one of the following cure Schedules:
  - 1) 24 hrs. @ 25°C (77°F)
  - 2) 1 hour @ 65°C (149°F)
  - 3) 15 minutes @ 90°C (194°F)

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