

Ayer, MA 01432

www.creativematerials.com

**ISO 9001 CERTIFIED** 

т 978.391.4700 F 978.391.4705

## 124-19C119-44

## ANISOTROPIC CONDUCTIVE EPOXY ADHESIVE

**DESCRIPTION**: 124-19C119-44 is a pre-catalyzed, low temperature curing, silver-filled epoxy adhesive. 124-19C119-44 is designed to be used for making electrical and mechanical attachments of electrical components and devices, when shorts between closely spaced contact pads are a concern. 124-19C119-44 provides for electrical conductivity in the Z-axis while remaining electrically insulating in the X-axis and Y-axis and maintaining a 0.0005-inch bondline. Unlike typical heat curing systems, this product always results in excellent conductivity and is less sensitive to handling and ambient conditions.

**SUGGESTED CURING:** Best properties, for most applications, result when cured following one of the following cure schedules under pressure but good results can be attained with temperatures between 80° and 200°C. End user is advised to experimentally determine temperature and time best suited for individual applications though higher temperatures are recommended for highest mechanical strength.

Time (min.)	Temp. (°C)
90	80
60	100
30	150
15	175

## **TYPICAL CURED PROPERTIES:**

Volume Resistivity (Ω-cm max)	
• Z-axis:	0.001
• X, Y axes:	1 x 1012
Recommended Pad Size (µm)	≥ 200
Recommended Pad Spacing (µm)	≥ 50
Water Absorption (%)	< 0.06
Specific Gravity	1.23
Lap Shear Strength (psi, 100°C cure)	> 1,200
Lap Shear Strength (psi, 150°C cure)	> 1,800
Young's Modulus (GPa)	12
Solvent Resistance	Excellent
Solderable	No
Useful Temperature Range (°C)	-55 to +225
Thermal Stability (°C)	Good to +250°C

**STORAGE:** Shelf life: < 4 days at 25°C, or 6 months at -40°C in unopened containers.

**SAFETY & HANDLING:** Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin. For recommended application and handling information please review the Anisotropic Conductive Adhesive Guidelines.

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.