



Creative Materials, Inc.
12 Willow Road
Ayer, MA 01432

T 978.391.4700
F 978.391.4705

122-38(SD)

SYRINGE DISPENSABLE, ELECTRICALLY CONDUCTIVE, EPOXY, DIE ATTACH ADHESIVE

DESCRIPTION: 122-38(SD) is a single component, silver filled, syringe dispensable, 100% solid, electrically conductive, epoxy adhesive. 122-38(SD) provides for fine pitch resolution, when syringe dispensed, stencil printed, or screen-printed. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties. Applications include adhesives, die attachment, printed circuit board fabrication, advanced material composites, sealing and high performance coatings. 122-38(SD) provides excellent adhesion to gold plated substrates, as well as tin/lead solder terminated components.

PROPERTIES:

Viscosity (cps)	85,000
Thixotropic Index	>5.0
Filler	Silver
Percent Silver, cured	72
Volume Resistivity, max. (Ω -cm)	0.0002
Thermal conductivity (W/mK)	2.1
Useful Temperature Range ($^{\circ}$ C)	-55 to +230
Thermal Stability ($^{\circ}$ C)	Good to 325
Lap Shear Strength (psi)	2,100
Glass Transition Temperature, Tg ($^{\circ}$ C)	98.7
Coef. Of Therm. Exp. (in/in/ $^{\circ}$ C)	
- Below Tg	38.9×10^{-6}
- Above Tg	13.9×10^{-5}

IONIC CONTENT:

Chloride	<10 ppm.
Sodium	<10 ppm.
Potassium	<10 ppm.

(Typical properties are not intended to be used as specification limits.)

SUGGESTED HANDLING AND CURING: Material is ready to use as received. Store frozen to maintain consistent flow properties. Allow material to warm up to room temperature before opening container. Prior to using, mix container well to resuspend filler. Cure for 10 minutes at 150 $^{\circ}$ C or for 15 minutes at 125 $^{\circ}$ C.

STORAGE: Shelf Life: <48 hours at 25 $^{\circ}$ C or 6 months at -40 $^{\circ}$ C.

SAFETY AND 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.

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.

REVISION DATE: 6/25/02 REVISION: B