

# 500°F ELECTRICALLY CONDUCTIVE ADHESIVE

## For High Power Applications

### 500°F - DURALCO™ 120

Resistance is 0.00008 ohm-cm

Just Mix and Apply

Cures at Room Temperature

Ideal for All Applications

Duralco™ 120 Epoxy Adhesive Forms Super Electrically Conductive Bonds for continuous use from -50°F to +500°F.

This epoxy contains over 70% Ultra Fine, Active Silver providing the ultimate in electrical conductivity.

Resistance measurements of 0.00008 ohm-cm has been reported in many independent tests.

Duralco™ 120 has excellent adhesion to copper, steel, stainless, aluminum, lead, glass, ceramics, plastics and dissimilar materials.

Cures at room temperature or mild heat to offer superior resistance to moisture, most chemicals and solvents.

Duralco™ 120 is commonly used in place of solder for electrically conductive bonds, bonding heat sensitive components, etc.

Using Duralco™ 120 instead of solder avoids exposing parts to soldering temperatures, flux contamination in addition to simplifying lab or production processing of parts.

**Applications Include:** bonding circuits, solder replacement, bonding semi-conductors, EMI shielding, thermistors, wire tacking, heating elements, assembling electronics, etc.

#### Users Report:

Duralco™ 120 was used for an application at 200°C for over 12 months with no degradation in electrical conductivity.

Duralco™ 120 successfully bonded bus bars and carried a current of 2400 amps for a short term test.

Duralco™ 120 bonds sputtering targets to copper based plates and provides 100°C continuous service.

Duralco™ 120 is the ideal choice for high power, high temperature, electronic or industrial application requiring high electrical conductivity.

#### Availability:

Cat. No.	Description	Temp.
Duralco™ 120-1	2 oz. Kit	500°F

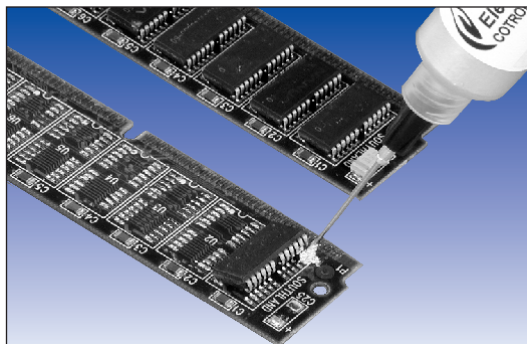
#### Pre-Measured Kits

Each Unit Contains: 1 jar of resin, 1 syringe of hardener and 1 mixing stick. (See Page 19 for details)

EE 120-2 . . . . .Three - 10gm units/box

EE 120-3 . . . . .Six - 10gm units/box

EE 120-10 . . . . .Ten - 10gm units/box



Duralco™ 120 in  
A Surface Mount Application



Duralco™ 120 Bonds  
Leads to an Instrument Assembly

#### Physical Properties

Max. Use Temperature **500°F**

Color	Silver
Base	Ultra Fine Silver
Mixed Viscosity	Smooth Fine Paste
Mixed Density (gms/cc)	3.8
Hardness (Shore D)	70
Lap Shear Strength (psi)	1500
Flexural Strength (psi)	1150
Compressive Strength (psi)	600
Thermal Expansion	4.1 x (10 <sup>-5</sup> /°C)
Volume Resistivity (ohm-cm)	0.00008
Mix Ratio	100/3.4
Thermal Conductivity*	50
Components	2
Cure	R.T. 16 hrs.
	100°F 4 hrs.
	150°F 2 hrs.
	200°F 10 min.
	250°F 7 min.

\*(BTU-in/Hr. ft<sup>2</sup>/°F)