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100% Solid Low Viscosity Fine Pitch with Extra-Fine Silver Long Pot-Life

# **IDEAL FOR:**

In-line Die-Attach
Large and Small Dies
Stamping dispensing
LED and other smaller dies

# **DESCRIPTION:**

ME8630-DA is an extra fine silver filled 100% solid low viscosity dieattach for finer pitch application. It is a low stress, low temperature curable die-attach adhesive paste. This single component, silver filled paste is electrically and thermally conductive. It is highly thixotropic with outstanding compatibility for bonding different adherends. The relatively medium Tg and modulus made it suitable for bonding both smaller and relatively large devices.

ME8630-DA has been designed to eliminate bleeding on both silver plated copper and alloy 42 leadframes. It maintains more than 300 psi bond strength at 250°C for high temperature wire-bonding.

### **AVAILABILITY:**

ME8630-DA is available in syringes for automatic needle dispense applications or in jars.

# **APPLICATION PROCEDURES:**

- (1) Thaw to ambient temperature for 30 minutes before opening jar or
- (2) Dispense adhesive onto clean substrate with a suitable pattern to assure full die coverage.
- (3) Cure according to the recommended schedules.

#### Die-Attach

# ME8630-DA

# **TYPICAL PROPERTIES\***

Electrical Resistivity <4x10<sup>-4</sup> ohm-cm ( 150 °C/ 30 min )

Dielectric Strength (Volts/mil) Not Applicable

Glass Transition Temp.(°C) 80

Current Carrying Capabilities >20 Amp/mm<sup>2</sup>

Lap-Shear Strength NA

Device Push-off Strength >2400 psi

>16.6 N/mm<sup>2</sup>

Hardness (Type) 80 ( D) Cured Density (gm/cc) 3.5

Thermal Conductivity >60 Btu-in/hr-ft<sup>2</sup>-°F

>8.6 W/m-°C

Linear Thermal Expansion 40

Coeff. (ppm/°C)

Maximum Continuous 150

Operation Temp. (°C)

Avg. Viscosity(5 rpm, 24°C) 8,000 cp

(Brookfield DV-1,spindle CP51)

# **CURE SCHEDULES:**

1 cP = 10-3 Pa·s = 1 mPa·s; 145psi=.99974MPa=.99974 N\*mm²; 1lb = 4.448N; 1 inch=25.4 mm; 1V/mil=39.3701 V/mm; 1 lb-in = 0.11298 N-m

### SHELF LIFE:

Storage temperature	Shelf Life
-40°C	1 yr
25°C	30 day

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