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**COOL-BOND**  
**ME7857-SC**

- High Thermal Conductivity
- Solvent Free, Thixotropic
- Electrically Insulating
- Epoxy Paste Adhesive
- < 20 ppm Ionic Impurities

**IDEAL FOR:**

- Large Area Die Attach
- Component Attach Including SMT
- Heatsink and Substrate Attach
- Sealing
- Power Module Bonding

**DESCRIPTION:**

ME7857-SC is a medium viscosity, silicon carbide filled, flexible epoxy for snap curing application. It is a reworkable, electrically insulating and thermally conductive epoxy paste adhesive. It exhibits outstanding flexibility down to -60°C. Ideal for bonding materials having highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). The stress-free flexible adhesive maintains good stable bond strength of 100 psi from 150-250°C and has outstanding thermal stability.

**AVAILABILITY:**

ME7857-SC is available in syringes for automatic needle dispense applications or in jars.

**APPLICATION PROCEDURES:**

- ( 1 ) Thaw for 30 minutes before opening jar.
- ( 2 ) Dispense adhesive onto clean substrate.
- ( 3 ) Cure according to one of the recommended schedules.

**TYPICAL PROPERTIES\***

Electrical Resistivity ( 150 °C/ 30 min. )	>1x10 <sup>13</sup> ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-60 ±10%
Current Carrying Capabilities	N/A
Lap-Shear Strength	>1000 psi >6.9 N/mm <sup>2</sup>
Device Push-off Strength	>1500 psi >10.3. N/mm <sup>2</sup>
Hardness (Type)	80 (A) ±10%
Cured Density (gm/cc)	2.3 ±10%
Thermal Conductivity	>20 Btu-in/hr-ft <sup>2</sup> -°F ±10% >2.9 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	100 ±15%
Maximum Continuous Operation Temp. (°C)	<150
Pot Life	24 hours
Avg. Viscosity(5 rpm, 24°C)	60,000 cp ±20%
Thixotropic 3-4	
Thixotropic Index	2.5

\* Properties given are typical values and not intended for use in preparing specifications. The user is advised to evaluate the product in the manner the product is intended to be used in manufacturing and in the final product.

**CURE SCHEDULES:**

Temperature	Time	Pressure
80°C	4 hrs	
100°C	2 hrs	
125°C	1 hr	
150°C	30 min	

**SHELF LIFE:**

Storage temperature	Shelf Life
-40°C	1 yr in original package

**CAUTION:** This product may cause skin irritation. Avoid skin contact. If contact does occur, wash immediately with soap and water. Please refer SDS for more details.

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