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COOL-BOND
ME7658-RC

**Stress Free, Very High
 Thermal Conductivity
 Fast Curing Epoxy Paste
 Insulating
 100% Solid**

IDEAL FOR:

- High Power Die-Attach
- Power Module Substrate Attach
- High Power Component Attach



DESCRIPTION:

ME7658-RC is a low stress, aluminum nitride crystallite filled, electrically insulating and thermally conductive epoxy paste adhesive. It exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). The very high thermal conductivity of this material makes it useful for bonding high-powered, large area die and components.

TYPICAL PROPERTIES*

Electrical Resistivity (150 °C/ 30 minute)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	>750
Glass Transition Temp.(°C)	-25 ±10%
Current Carrying Capabilities	N/A
Lap-Shear Strength	>1000 psi >6.9 N/mm ²
Device Push-off Strength	>1200 psi >8.3 N/mm ²
Hardness (Type)	80 (A) ±10%
Cured Density (gm/cc)	2.3 ±10%
Thermal Conductivity	13 Btu-in/hr-ft ² -°F ±10% 1.9 W/m-°C ±10%
Linear Thermal Expansion Coeff. (ppm/°C)	120 ±15%
Maximum Continuous Operation Temp. (°C)	<150
Pot Life	
Avg. Viscosity(0.5 rpm, 24°C) (Brookfield DV-1,spindle CP51)	80,000 cp ±20%
Thixotropic Index	

* 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.

AVAILABILITY:

ME7658-RC 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) Adhesive dots should be in cross-hatched pattern for large area bonding.
- (4) Cure according to one of the recommended schedules.

CURE SCHEDULES:

Temperature	Time	Pressure
80°C	2 hr	
100°C	1 hr	
150°C	15 min	

SHELF LIFE:

Storage temperature	Shelf Life
-40°C	1 yr
25°C	3 mo

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. The information contained herein is believed to be reliable. All recommendations or suggestions are made without guarantee inasmuch as conditions and methods of commercial use are beyond our control. 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 to be used in manufacturing and in the final product. Under no circumstance shall AI Technology be liable for accidental, consequential or other damages arising from the use or handling of this product.

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