

Snap Curing
Solvent Free, Thixotropic
Thermally Conductive Epoxy
Electrically Insulating
<20 ppm Ionic Impurities

IDEAL FOR:

Large Area Die Attach

Power Substrate and Component Attach

DESCRIPTION:

ME7655-RC is a reworkable, alumina filled, electrically insulating and thermally conductive epoxy paste adhesive which exhibits outstanding flexibility for bonding materials with highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). The high thermal conductivity of this material makes it useful for bonding high-powered, large area die and components.

ME7655-RC can be cured at 150°C for30 minutes without creating voids. It can be readily reworked at 80-100°C.

AVAILABILITY:

ME7655-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) Cure according to one of the recommended schedules.

PRIMA-BOND ME7655-RC

TYPICAL PROPERTIES*

Electrical Resistivity (150°C/ 90 sec)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	750
Glass Transition Temp.(°C)	-25
Current Carrying Capabilities	N/A
Lap-Shear Strength	1000 psi
	6.9 N/mm²
Device Push-off Strength	1200 psi
	8.3 N/mm ²
Hardness (Type)	80 (A)
Cured Density (gm/cc)	1.8
Thermal Conductivity	6 Btu-in/hr-ft²-°F
	0.86 W/m-°C
Linear Thermal Expansion	120
Coeff. (ppm/ºC)	
Maximum Continuous	150
Operation Temp. (°C)	
Avg. Viscosity(5.0 rpm, 24°C)	50,000 cp
(Brookfield DV-1,spindle CP51)	

^{*} 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:

<u>Temperature</u>	<u>l ime</u>	Presure
80°C	4 hr	
100°C	2 hr	
125°C	1 hr	
150°C	30 min	

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

SHELF LIFE:

Storage temperature	Shelf Life
-40°C	1 yr

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