



AI TECHNOLOGY INC
 70 Washington Road
 Princeton Jct., NJ 08550
 (609) 799-9388 fax (609) 799-9308
 E-Mail: ait@aitechnology.com
 Internet: http://www.aitechnology.com

MICRO-ENCAPSULANT
MEE7655-5

**Flexible
 Microencapsulation
 Microelectronic Potting
 High Thermal Conductivity**

IDEAL FOR:

- Stress Relief Potting**
- Reworkable Encapsulant**
- Insulation Protection**
- Mechanical Protection**
- Power Module Potting**

DESCRIPTION:

MEE7655-5 is a high flow, pre-mixed frozen, long pot life, low ionic encapsulant for microelectronic devices. It is an alumina filled, electrically insulating epoxy compound which exhibits outstanding flexibility for adhering materials having highly mismatched CTE's (i.e., alumina to aluminum, silicon to copper). The stress free flexible characteristic of this material makes it useful for potting large area die and components.

MEE7655-5 has less than 20 ppm total ionic impurities. It can be readily reworked at 80-100°C. It has eight hours pot-life upon thawing to ambient temperature.

AVAILABILITY:

MEE7655-5 is available in syringes for automatic needle dispense applications or in jars. It is also available in bi-pak (twin-syringes) with static motion mixer for meter mix direct application with shelf life of twelve months.

APPLICATION PROCEDURES:

- (1) Thaw to ambient temperature for 30 minutes before opening jar.
- (2) Dispense adhesive onto clean substrate.
- (3) Cure according to one of the recommended schedules.
- (4) Thawed material has a pot-life of eight hours.

TYPICAL PROPERTIES*

Electrical Resistivity (>80 °C/ >60 minut)	>1x10 ¹⁴ ohm-cm
Dielectric Strength (Volts/mil)	750
Glass Transition Temp.(°C)	-30
Current Carrying Capabilities	N/A
Lap-Shear Strength	N/A
Device Push-off Strength	>1000 psi >6.9 N/mm ²
Hardness (Type)	80 (A)
Cured Density (gm/cc)	2.3
Thermal Conductivity	12 Btu-in/hr-ft ² -°F 1.7 W/m-°C
Linear Thermal Expansion Coeff. (ppm/°C)	110
Maximum Continuous Operation Temp. (°C)	150
Avg. Viscosity(0.5 rpm, 24°C)	85,000 cp
	1.25 (TI)

* 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>Time</u>
100°C	3 hr
125°C	1.5 hr
150°C	45 min

SHELF LIFE:

<u>Storage temperature</u>	<u>Shelf Life</u>
-40°C	3 mo

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