

## Electrolube® ACT090FG

### Thermally Conductive, Electrically Isolating Adhesive Tape

#### DESCRIPTION

**Electrolube® ACT090FG** is a thermally conductive and electrically isolating adhesive tape. It has a thermal conductivity of 0.9 W/m-K. The double-sided adhesive layer is pressure sensitive and provides a high bond strength between heatsinks and heat dissipating components. **ACT090FG** creates a thermal connection and mechanical fixation in one step.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

#### FEATURES AND BENEFITS

- Thermal conductivity of 0.9 W/m-K
- High electrical isolation strength
- Strong mechanical bonding to many surfaces, no need for additional clamping
- Available in die-cut formats

#### APPROVALS

Standard	Status
RoHS	Compliant
REACH	Compliant

#### PRODUCT INFORMATION

ACT090FG is typically converted into customer specific shapes and sizes.  
Standard sheet size is 330 mm x 330 mm (13 x 13”).

**TYPICAL PROPERTIES**

Category	Result		Unit	Test Method
<b>Physical Property</b>				
Color	White			Visual
Thicknesses	0.15 0.006	0.25 0.01	mm inch	-
Reinforcement Layer	Fiberglass			
Density	1.9		g/cc	ASTM D792
Operating Temperature Range	-60 to 120		°C	-
Lap Shear Strength	50		N/cm <sup>2</sup>	ASTM D1002
Die Shear Strength at 25 °C	100		N/cm <sup>2</sup>	-
Die Shear Strength at 80 °C	70		N/cm <sup>2</sup>	-
Flammability Rating	Meets V-0			UL94
<b>Electrical Properties</b>				
Dielectric Breakdown	2	3	kV	ASTM D149
Volume Resistivity	>10 <sup>11</sup>	>10 <sup>11</sup>	Ohm - cm	ASTM D257
<b>Thermal Properties</b>				
Thermal Conductivity	0.9	0.9	W/m-K	ASTM D5470
Thermal Impedance at 15 psi	0.47	0.78	°C-inch <sup>2</sup> /W	ASTM D5470
Thermal Impedance at 50 psi	0.43	0.73	°C-inch <sup>2</sup> /W	ASTM D5470

**APPLICATION GUIDELINES**

Remove liner from one side and press AT090FG firmly against the surface. Apply pressure from the center of pad towards edge to squeeze out any air pockets. Remove the topline and attach component. Press strongly for optimal adhesion.

**ADDITIONAL INFORMATION**

**Shelf Life:** 12 Months

The product should be tested to ensure its suitability for the end application conditions.

**SAFETY & WARNING**

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

**CONTACT INFORMATION**

[www.macdermidalpha.com](http://www.macdermidalpha.com)

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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