MacDermid Alpha ELECTRONICS SOLUTIONS

TECHNICAL DATA SHEET

Electrolube® GFP850

Thermally Conductive Gap Filling Pad

DESCRIPTION

Electrolube® GFP850 is a silicone based, thermally conductive and electrically isolating gap filling pad with a high thermal conductivity of 8.5 W/m-K. Due to its flexibility and softness, the **GFP850** is highly suitable for applications where height differences need to be adjusted. The material easily conforms to irregular surfaces, minimizing the overall thermal impedance.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- Thermal conductivity of 8.5 W/m-K; aids rapid heat transfer over uneven surfaces
- Very soft, requires low compression force to ensure good wet-out
- Natural tack for easy processing and reduced interfacial resistance
- Available in a range of thicknesses and die-cut formats

APPROVALS

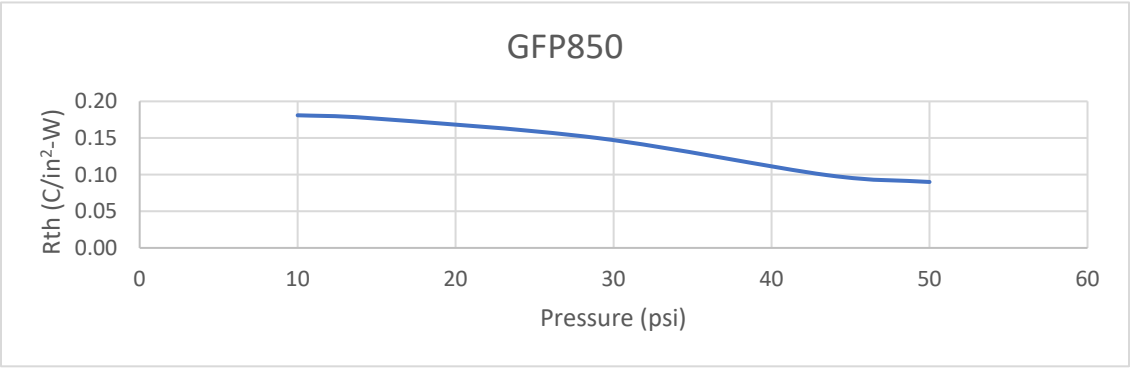
Standard	Status
RoHS	Compliant
REACH	Compliant

PRODUCT INFORMATION

GFP850 is typically converted into customer specific shapes and sizes.
Standard size is 320mm x 320mm (12.6 x 12.6”).
Other thicknesses are available upon request.

TYPICAL PROPERTIES

Category	Result	Unit	Test Method
Physical Property			
Color	Gray Green		Visual
Standard Thickness Range	1.0 to 5.0 0.040 to 0.200	mm inch	-
Natural Tack	2 sides		-
Density	3.6	g/cc	ASTM D792
Hardness	35	Shore 00	ASTM D2240
Operating Temperature Range	-60 to +180	°C	-
Deflection at 10 psi	14	%	ASTM D5470 Modified
Flammability Rating	Meets V-0		UL94
Electrical Properties			
Dielectric Breakdown	8	kV/mm	ASTM D149
Volume Resistivity	$>10^{10}$	Ohm - cm	ASTM D257
Thermal Properties			
Thermal Conductivity	8.5	W/m-K	ASTM D5470
Thermal Impedance at 10 psi	0.18	°C-inch^2/W	ASTM D5470
Thermal Impedance at 50 psi	0.09	°C-inch^2/W	ASTM D5470



APPLICATION GUIDELINES

Remove protective liners before application.

ADDITIONAL INFORMATION

Shelf Life: 60 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

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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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