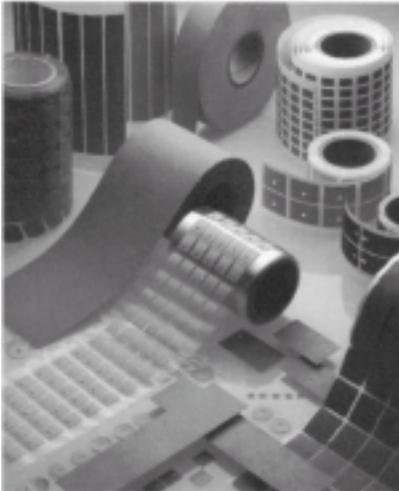


Sil-Pad® 900S

High Performance Insulator for Low Pressure Applications

The Sil-Pad 900S family of thermally conductive insulation materials is designed for applications requiring high thermal performance and electrical isolation. These applications also typically have low mounting pressures for component clamping.



Sil-Pad 900S material combines a smooth and highly compliant surface characteristic with high thermal conductivity. These features optimize the thermal resistance properties at low pressure.

Applications requiring low component clamping forces include discrete semiconductors (TO-220, TO-247 and TO-218) mounted with spring clips. Spring clips assist with quick assembly but apply a limited amount of force to the semiconductor. The smooth surface texture of Sil-Pad 900S minimizes interfacial thermal resistance and maximizes thermal performance.

Typical Properties of Sil-Pad 900S

Property	Typical Value	Test Method			
Color	Mauve	Visual			
Thickness	0.009"	ASTM D374			
Elongation, %45° to warp & fill	20	ASTM D412			
Tensile Strength	9 MPa	ASTM D412			
Electrical					
Dielectric Breakdown Voltage					
Type 1 Electrodes	5.5 kVa-c	ASTM D149			
Type 3 Electrodes	8.3 kVa-c	ASTM D149			
Dielectric Constant	6	ASTM D150			
Volume Resistivity, Ohm-meter	10 ¹⁰	ASTM D257			
Thermal					
Thermal Conductivity	1.6 W/m-k	ASTM D5470			
Thermal Impedance vs. Pressure					
Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance, °C/W	3.96	3.41	2.90	2.53	2.32
Thermal Impedance Per ASTM D5470, °C-in ² / W (1)	0.95	0.75	0.61	0.47	0.41

1). The ASTM D5470 (Bergquist Corrected) test fixture was used. The recorded value includes interfacial thermal resistance. These values are given to the customer for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

TOLERANCES

0.015 inch tolerances are held on width, length, hole diameters and hole locations. Please contact your sales representative if tighter tolerances are required.

OPTIONS

Sil-Pad 900S is available in sheet, die-cut, or roll form, with and without pressure sensitive adhesive. Standard sheet sizes of 6" x 6", 6" x 12", 8" x 8", 10" x 10", and 12" x 12" are available.

SPECIAL SHAPES

We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.

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www.bergquistcompany.com

The Bergquist Company
 North American Headquarters
 18930 West 78th Street
 Chanhassen, MN 55317
 Phone: 800-347-4572
 Fax: 952-835-4156

The Bergquist Company-Europe
 Bramenberg 9a
 3755 BT Eemnes
 Netherlands
 Phone: 31-35-5380684
 Fax: 31-35-5380295

The Bergquist Company-Asia
 9F-1, No.314, Section 4
 Ren Ai Road
 Taipei, Taiwan, ROC 106
 Phone: 886-2-2700-7796
 Fax: 886-2-2700-7795

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