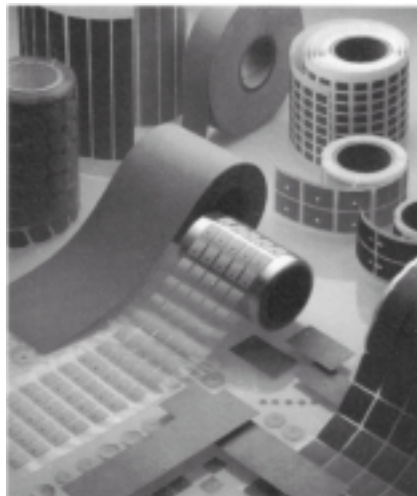


# Sil-Pad<sup>®</sup> A2000

## High Performance, High Reliability Thermally Conductive Interface Material

Sil-Pad A2000 (SPA-2000) is a conformable elastomer with very high thermal conductivity that acts as a thermal interface between electrical components and heat sinks. SPA-2000 is for applications where optimal heat transfer is a requirement.



This thermally conductive silicone elastomer is formulated to maximize the thermal and dielectric performance of the filler/binder matrix. The result is a “grease-free”, conformable material capable of meeting or exceeding the thermal and electrical requirements of high reliability electronic packaging applications.

### Typical Applications

- Motor Drive Controls
- Avionics
- High Voltage Power Supplies
- Power Transistor / Heat Sink Interface

Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader.

### Typical Properties of Sil-Pad A2000

Property	Typical Value	Test Method			
Color	White	Visual			
Thickness	0.010” to 0.125”	ASTM D374			
Specific Gravity	3.2 g/cc	ASTM D792			
Hardness (Shore Type A)	90	ASTM D2240			
Heat Capacity	1.0 J/g-K	ASTM C351			
Continuous Use Temp.	-60°C to 200°C				
<b>Electrical</b>					
Dielectric Breakdown Voltage	4000 AC-minimum	ASTM D149			
Dielectric Constant	7	ASTM D150			
Volume Resistivity, Ohm-meter	10 <sup>11</sup>	ASTM D257			
Flame Rating	94V-0 (pending)	U.L.			
<b>Thermal</b>					
Thermal Conductivity	3.5 W/m-K	ASTM D5470			
<b>Thermal Impedance vs. Pressure</b>					
Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance, °C/W	2.48	2.22	1.75	1.42	1.33
Thermal Impedance Per ASTM D5470, °C-in <sup>2</sup> / W (1)	0.46	0.26	0.24	0.22	0.20

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.

### SPECIAL THICKNESS

SP A2000 is available in a variety of thickness gages to meet customer requirements. Preferred thickness includes 10, 15, and 20 mil. Please contact Inside Sales for additional thickness information.

### 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

SP A2000 is available in sheet or die-cut form, with and without pressure sensitive adhesive. Standard sheet sizes of 8” x 8”, 8” x 12”, 10” x 10”, and 8” x 16” are available with and without pressure sensitive adhesive.

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