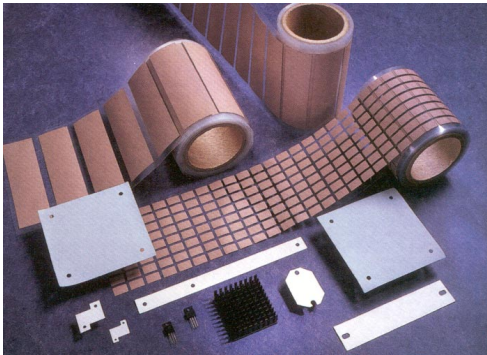


Electrically Insulating, Thermally Conductive Elastomeric Material

Features and Benefits

- Thermal impedance
0.42°C-in²/W (@50 psi)
- Solvent-free process
- Alternative to Sil-Pad I500
- Elastomeric compound coated on both sides



Bergquist Sil-Pad A1500 is a silicone based thermally conductive and electrically insulating material. It consists of a cured silicone elastomeric compound coated on both sides of a fiberglass reinforcement layer.

Sil-Pad A1500 has been designed as an effective alternative to the Sil-Pad I500 product filler technologies.

Sil-Pad A1500 is a product of similar performance to the Sil-Pad I500 manufactured with a more environmentally friendly, solvent-free process.

Typical Properties of Sil-Pad A1500						
Property	Imperial Value		Metric Value		Test Method	
Color	Green		Green		Visual	
Reinforcement Carrier	Fiberglass		Fiberglass		***	
Thickness, (inch) / (mm)	0.010		0.254		ASTM D374	
Hardness, (Shore A)	80		80		ASTM D2240	
Breaking Strength, (lbs./inch) / (kN/m)	65		12		ASTM D1458	
Elongation, (%45° to Warp & Fill)	40		40		ASTM D412	
Continuous Use Temp., (°F) / (°C)	-76 to 392		-60 to 200		***	
Electrical	Imperial Value		Metric Value		Test Method	
Dielectric Breakdown Voltage, (VAC)	6000		6000		ASTM D149	
Dielectric Constant, (1000 Hz)	7.0		7.0		ASTM D150	
Volume Resistivity, (Ohm-meter)	10 ¹¹		10 ¹¹		ASTM D257	
Flame Rating	94 V-O		94 V-O		U.L.	
Thermal	Imperial Value		Metric Value		Test Method	
Thermal Conductivity, (W/m-K)	2.0		2.0		ASTM D5470	
Thermal Impedance vs. Pressure						
	Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance, (°C/W)		3.03	2.62	2.21	1.92	1.78
Thermal Impedance, (°C-in ² /W) (I)		0.59	0.50	0.42	0.34	0.31
<small>1). The ASTM D5470 (Bergquist Modified) 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.</small>						

Typical Applications Include

- Power supplies
- Automotive electronics
- Motor controls
- Power semiconductors

Configurations

Available:

- Sheet form
- Die-Cut parts
- Roll form
- With or without pressure sensitive adhesive
- Maximum recommended roll width is 10 inches

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

Sil-Pad[®]: U.S. Patents 4,574,879; 4,602,125; 4,602,678; 4,685,987; 4,842,911 and others

Product Data Sheet / PDS-0602-001-01; Rev 01