

## Electrically Insulating, Thermally Conductive Elastomeric Material

### Features and Benefits

- Thermal impedance: 0.42°C-in²/W (@50 psi)
- 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 performs well under clamping pressure up to 200 psi and is an excellent choice for high performance applications requiring electrical isolation and cut-through resistance.

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 D 374			
Hardness (Shore A)	80	80	ASTM D 2240			
Breaking Strength (lbs/inch) / (kN/m)	65	12	ASTM D 1458			
Elongation (%45° to Warp and Fill)	40	40	ASTM D 412			
Continuous Use Temp (°F) / (°C)	-76 to 356	-60 to 180	—			
<b>ELECTRICAL</b>						
Dielectric Breakdown Voltage (Vac)	6000	6000	ASTM D 149			
Dielectric Constant (1000 Hz)	7.0	7.0	ASTM D 150			
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D 257			
Flame Rating	V-O	V-O	U.L. 94			
<b>THERMAL</b>						
Thermal Conductivity (W/m-K)	2.0	2.0	ASTM D 5470			
<b>THERMAL PERFORMANCE vs PRESSURE</b>						
	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-in²/W) (1)		0.59	0.50	0.42	0.34	0.31

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

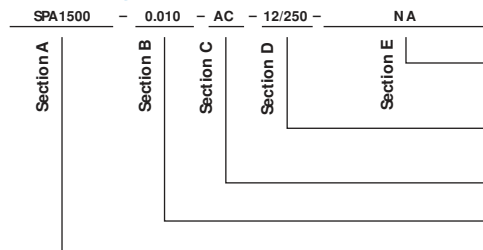
### Typical Applications Include:

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

### Configurations Available:

- Sheet form, die-cut parts, and roll form
- With or without pressure sensitive adhesive

### Building a Part Number



### Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

\_\_\_ = Standard configuration dash number, 1212 = 12" x 12" sheets, 12/250 = 12" x 250' rolls, or 00 = custom configuration

AC = Adhesive, one side  
00 = No adhesive

Standard thicknesses available: 0.010"

SPA1500 = Sil-Pad A1500 Material

Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).

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



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