

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 D374		
Hardness (Shore A)	80	80	ASTM D2240		
Breaking Strength (lbs/inch) / (kN/m)	65	12	ASTM D1458		
Elongation (% - 45° to Warp and Fill)	40	40	ASTM D412		
Continuous Use Temp (°F) / (°C)	-76 to 356	-60 to 180	—		
ELECTRICAL					
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	V-O	V-O	U.L. 94		
THERMAL					
Thermal Conductivity (W/m-K)	2.0	2.0	ASTM D5470		
THERMAL PERFORMANCE 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-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.

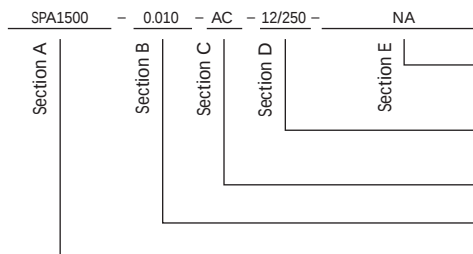
Typical Applications Include:

- 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

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

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.

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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