

# Sil-Pad® 1500ST

Electrically Insulating, Thermally Conductive, Soft Tack Elastomeric Material

## Features and Benefits

- Thermal impedance: 0.23°C-in<sup>2</sup>/W (@50 psi)
- Naturally tacky on both sides
- Pad is repositionable
- Excellent thermal performance
- Auto-placement and dispensable



Bergquist Sil-Pad 1500ST (Soft Tack) is a fiber-glass reinforced thermal interface material that is naturally tacky on both sides. Sil-Pad 1500ST exhibits superior thermal performance when compared to the competitors' thermal interface materials. Sil-Pad 1500ST is supplied in sheet or roll form for exceptional auto-dispensing and auto-placement in high volume assemblies. Sil-Pad 1500ST is intended for placement between an electronic power device and its heat sink.

TYPICAL PROPERTIES OF SIL-PAD 1500ST						
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	Blue	Blue	Visual			
Reinforcement Carrier	Fiberglass	Fiberglass	—			
Thickness (inch) / (mm)	0.008	0.203	ASTM D374			
Hardness (Shore 00)	75	75	ASTM D2240			
Breaking Strength (lbs/inch) / (kN/m)	1.9	0.34	ASTM D1458			
Elongation (% - 45° to Warp and Fill)	22	22	ASTM D412			
Tensile Strength (psi) / (MPa)	238	1.6	ASTM D412			
Continuous Use Temp (°F) / (°C)	-76 to 356	-60 to 180	—			
<b>ELECTRICAL</b>						
Dielectric Breakdown Voltage (Vac)	3000	3000	ASTM D149			
Dielectric Constant (1000 Hz)	6.1	6.1	ASTM D150			
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D257			
Flame Rating	V-O	V-O	U.L. 94			
<b>THERMAL</b>						
Thermal Conductivity (W/m-K)	1.8	1.8	ASTM D5470			
<b>THERMAL PERFORMANCE vs PRESSURE</b>						
	Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		1.54	1.52	1.51	1.49	1.46
Thermal Impedance (°C-in <sup>2</sup> /W) (1)		0.37	0.28	0.23	0.21	0.20
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:

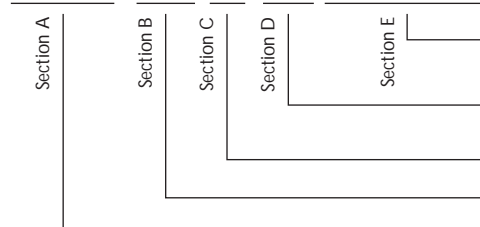
- Power supplies
- Automotive electronics
- Motor controls

## Configurations Available:

- Sheet form, die-cut parts and slit-to-width roll form

## Building a Part Number

SP1500ST - 0.008 - 02 - 1012 - NA



## 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, 1012 = 10" x 12" sheets, 10/250 = 10" x 250' rolls (8 mil only), or 00 = custom configuration

02 = Natural tack, both sides

Standard thicknesses available: 0.008"

SP1500ST = Sil-Pad 1500ST 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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