

### Features and Benefits

- Thermal conductivity:  
SPT 400 – 0.9 W/m-K  
SPT 1000 – 1.2 W/m-K
- For clip-mounted plastic power packages



SPT 400 and SPT 1000 (Sil-Pad Tubes) provide thermally conductive insulation for clip-mounted plastic power packages. Sil-Pad Tubes are made of silicone rubber with high thermal conductivity.

Sil-Pad Tube 1000 is best suited for higher thermal performance. Sil-Pad Tube 400 is ideal for applications requiring average thermal conductivity and economy.

Sil-Pad Tube 400 and Sil-Pad Tube 1000 are designed to meet VDE, U.L. and TUV agency requirements.

### Typical Applications Include:

- Clip-mounted power semiconductors
- TO-220, TO-218, TO-247 and TO-3P

### Configurations Available:

- TO-220, TO-218, TO-247 and TO-3P

Special thickness and diameters can also be ordered. Please contact Bergquist Sales.

TYPICAL PROPERTIES OF SIL-PAD TUBE 400			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Gray/Green	Gray/Green	Visual
Thickness / Wall (inch) / (mm)	0.012	0.305	ASTM D374
Hardness (Shore A)	80	80	ASTM D2240
Breaking Strength (lbs/inch) / (kN/m)	6	1	ASTM D1458
Continuous Use Temp (°F) / (°C)	-76 to 356	-60 to 180	—
<b>ELECTRICAL</b>			
Dielectric Breakdown Voltage (Vac)	5000	5000	ASTM D149
Dielectric Constant (1000 Hz)	5.5	5.5	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)	0.9	0.9	ASTM D5470
Thermal Impedance (°C-in <sup>2</sup> /W) (1)	0.6	0.6	ASTM D5470
TYPICAL PROPERTIES OF SIL-PAD TUBE 1000			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Brown	Brown	Visual
Thickness / Wall (inch) / (mm)	0.012	0.30	ASTM D374
Hardness (Shore A)	80	80	ASTM D2240
Breaking Strength (lbs/inch) / (kN/m)	6	1	ASTM D1458
Continuous Use Temp (°F) / (°C)	-76 to 356	-60 to 180	—
<b>ELECTRICAL</b>			
Dielectric Breakdown Voltage (Vac)	5000	5000	ASTM D149
Dielectric Constant (1000 Hz)	4.5	4.5	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)	1.2	1.2	ASTM D5470
Thermal Impedance (°C-in <sup>2</sup> /W) (1)	0.4	0.4	ASTM D5470

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.

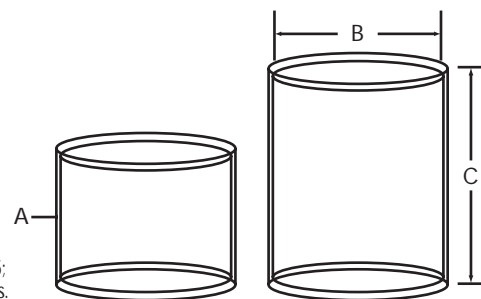
### Standard Dimensions

- A = Wall Thickness: .305 mm (.012") + .10 mm / -0.0 mm (+.004" / -0.0")  
 B = Inner Diameter: 11 mm (.433") or 13.5 mm (.532") ± 1.0 mm (± .039")  
 C = Length: 25 mm (.985") or 30 mm (1.18") +3.18 mm / -0.0 mm (+ .125" / - 0.0")

Special lengths are available. For more information, contact a Bergquist Sales Representative.

### Ordering Procedure:

Sample: SPT 400 \_\_\_ - \_\_\_ - \_\_\_  
 "A" – "B" – "C"



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



[www.bergquistcompany.com](http://www.bergquistcompany.com)

The Bergquist Company -  
North American Headquarters  
18930 West 78th Street  
Chanhassen, MN 55317  
Phone: 800-347-4572  
Fax: 952-835-0430

The Bergquist Company -  
European Headquarters  
Bramenberg 9a, 3755 BT Eemnes  
Netherlands  
Phone: 31-35-5380684  
Fax: 31-35-5380295

The Bergquist Company - Asia  
Room 15, 8/F Wah Wai Industrial Centre  
No. 38-40, Au Pui Wan Street  
Fotan, Shatin, N.T. Hong Kong  
Ph: 852.2690.9296  
Fax: 852.2690.2344

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