

Features and Benefits

- Thermal impedance: 0.32°C-in²/W (@50 psi)
- Optimal heat transfer
- High thermal conductivity: 3.0 W /m-K



Sil-Pad A2000 is a conformable elastomer with very high thermal conductivity that acts as a thermal interface between electrical components and heat sinks. Sil-Pad A2000 is for applications where optimal heat transfer is a requirement.

This thermally conductive silicone elastomer is formulated to maximize the thermal and dielectric performance of the filler/binder matrix. The result is a grease-free, conformable material capable of meeting or exceeding the thermal and electrical requirements of high reliability electronic packaging applications.

TYPICAL PROPERTIES OF SIL-PAD A2000						
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD			
Color	White	White	Visual			
Reinforcement Carrier	Fiberglass	Fiberglass	—			
Thickness (inch) / (mm)	0.015 to 0.020	0.381 to 0.508	ASTM D 374			
Hardness (Shore A)	90	90	ASTM D 2240			
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269			
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—			
ELECTRICAL						
Dielectric Breakdown Voltage (Vac)	4000	4000	ASTM D 149			
Dielectric Constant (1000 Hz)	7.0	7.0	ASTM D 150			
Volume Resistivity (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D 257			
Flame Rating	V-O	V-O	UL94			
THERMAL						
Thermal Conductivity (W /m-K)	3.0	3.0	ASTM D 5470			
THERMAL PERFORMANCE vs PRESSURE						
	Pressure (psi)	10	25	50	100	200
TO -220 Thermal Performance (°C/W) 0.015"		2.05	1.94	1.86	1.79	1.72
Thermal Impedance (°C-in ² /W) 0.015" (1)		0.53	0.40	0.32	0.28	0.26

1) The ASTM D 5470 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.

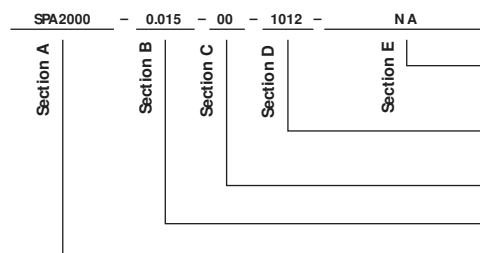
Typical Applications Include:

- Motor drive controls
- Avionics
- High-voltage power supplies
- Power transistor / heat sink interface

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, 1012 = 10" x 12" sheets, 10/250 = 10" x 250' rolls, or 00 = custom configuration

AC = Adhesive, one side
00 = No adhesive

Standard thicknesses available: 0.015", 0.020"

SPA2000 = Sil-Pad A2000 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