

Features and Benefits

- Thermal impedance: 0.33°C-in²/W (@50 psi)
- Optimal heat transfer
- High thermal conductivity: 3.5 W/m-K



Sil-Pad 2000 is a high performance, thermally conductive insulator designed for demanding military/aerospace and commercial applications. In these applications, Sil-Pad 2000 complies with military standards.

Sil-Pad 2000 is a silicone elastomer 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 2000						
PROPERTY		IMPERIAL VALUE	METRIC VALUE		TEST METHOD	
Color		White	White		Visual	
Reinforcement Carrier		Fiberglass	Fiberglass		—	
Thickness (inch) / (mm)		0.010 to 0.020	0.254 to 0.508		ASTM D374	
Hardness (Shore A)		90	90		ASTM D2240	
Continuous Use Temp (°F) / (°C)		-76 to 392	-60 to 200		—	
ELECTRICAL						
Dielectric Breakdown Voltage (Vac)		4000	4000		ASTM D149	
Dielectric Constant (1000 Hz)		4.0	4.0		ASTM D150	
Volume Resistivity (Ohm-meter)		10 ¹¹	10 ¹¹		ASTM D257	
Flame Rating		V-O	V-O		UL94	
THERMAL						
Thermal Conductivity (W/m-K)		3.5	3.5		ASTM D5470	
THERMAL PERFORMANCE vs PRESSURE						
Pressure (psi)		10	25	50	100	200
TO-220 Thermal Performance (°C/W)		2.61	2.32	2.02	1.65	1.37
Thermal Impedance (°C-in²/W) (1)		0.57	0.43	0.33	0.25	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.						

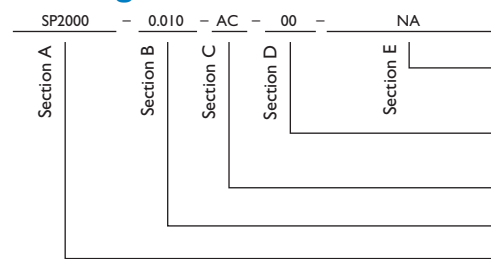
Typical Applications Include:

- Power supplies
- Power semiconductors
- Military Electronics
- Avionics
- Motor controls
- U.L. File Number E59150
- Aerospace

Configurations Available:

- Sheet form, die-cut parts
- 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.

--- = Standard configuration dash number, 1212 = 12" x 12" sheets, or 00 = custom configuration

AC = Adhesive, one side
00 = No adhesive

Standard thicknesses available: 0.010", 0.015", 0.020"

SP2000 = Sil-Pad 2000 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