

High Performance

Sil-Pad 1000®, Sil-Pad 1500® and Sil-Pad 2000®

SIL-PAD 1000

Sil-Pad 1000 has the same excellent mechanical and physical characteristics of our Sil-Pad 400 material while offering a 35% reduction in thermal resistance.

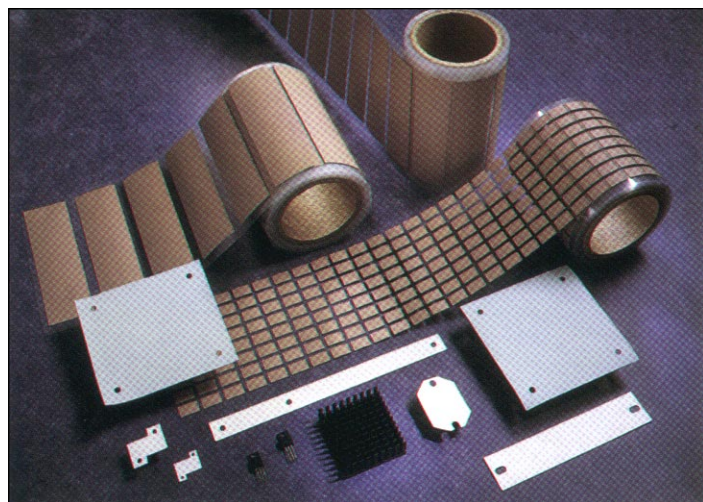
Sil-Pad 1000 is a composite of silicone rubber and fiberglass. It is specially filled and offers low thermal resistance. Sil-Pad 1000 is non-toxic and resists damage from cleaning agents. It is flame retardant and specially formulated for use as a thermally conductive insulator.

SIL-PAD 1500

Sil-Pad 1500 is an economical, high performance insulator with a thickness between that of Sil-Pad 1000 and Sil-Pad 2000.

SIL-PAD 2000

Sil-Pad 2000 is Bergquist's high performance, high reliability thermally conductive insulator. Sil-Pad 2000 is designed for demanding military / aerospace and commercial applications. In these applications, Sil-Pad 2000 complies with military standards. This silicone elastomer is specially filled 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. Sil-Pad 2000 is also available in thicknesses from .010" to .060".



Die-Cut parts, Rolls and Sheets

Sil-Pad 1000, 1500 and 2000 are available in die-cut parts and sheets (6" x 6" min., 6" x 12", 8" x 8", 10" x 10" and 12" x 12"). Only Sil-Pad 1000 and 1500 are available in roll form.

SIL-PAD 2000 Outgassing Data for Spacecraft Materials

Post Cure Conditions	%TML (Acceptable)	%CVLM (Acceptable)
24 hrs. @ 175°C	.07	.03
No Post Cure	.26	.10

MIL SPEC.
MIL-M-38527/08
MIL-I-49456
MIL-I-49466/02
MIL-M-87111
U.L. FILE NUMBER
E59150
FSCM NUMBER 55285

Physical Properties	Sil-Pad 1000	Sil-Pad 1500	Sil-Pad 2000	Test Method
Color	Pink	Green	White	Visual
Thickness Inches (mm)	.009 ± .001" (.23 ± .025)	0.010 ± .001" (.25 ± .025)	.015 ± .002" (.38 ± .025)	ASTM D 374
Elongation, % 45° to warp and fill	45	20	20	ASTM D 412
Hardness, Shore A ± 5	85	80	90	ASTM D 2240
Breaking Strength Lbs/inch (kN/m)	100 (18)	65 (12)	65(12)	ASTM D 1458
Tensile Strength, kPsi (MPa)	4 (30)			ASTM D 412
Thermal Vacuum Weight Loss % (TML) as manufactured	.22		see	NASA SP-R-0022A
Volatile Condensable Material % (CVCM) as manufactured	.08		see	NASA SP-R-0022A
Specific Gravity	1.5	1.5	1.5	ASTM D 792
Continuous Use Temp., °C	-60 to +180	-60 to +200	-60 to +200	--
Construction	Silicone/Fiberglass	Silicone/Fiberglass	Silicone/Fiberglass	

Thermal Properties	Sil-Pad 1000	Sil-Pad 1500	Sil-Pad 2000	Test Method
Thermal Resistance, °C/-in ² /W	0.35	0.23	0.2	ASTM D 5470
Thermal Conductivity, W/m-K	1.2	2.0	3.5	ASTM D 5470

Electrical Properties	Sil-Pad 1000	Sil-Pad 1500	Sil-Pad 2000	Test Method
Breakdown Voltage, Volts a-c Min.	4500	4000	4000	ASTM D 149
Dielectric Constant, 1000 Cps (Hz)	4.5	4	4.0	ASTM D 150
Volume Resistivity, Ohm Metre	1.0x10 ¹¹	1.0 x 10 ¹¹	1.0x10 ¹¹	ASTM D 257

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [bergquist company manufacturer](#):

Other Similar products are found below :

[SIL-PAD 2000 150MMX150MM SHEET](#) [GP2000S40-0.040-02-4/4](#) [GPEMI1.0-0.060-01-0816](#) [SPA2000-0.020-00-1012](#) [TGP6000ULM-0.125-12-0816](#) [803265](#) [GPEMI1.0-0.040-01-0816](#) [GP3500ULM-G-0.100-12-0816](#) [TGP12000ULM-0.080-00-0808](#) [GP1500-0.160-02-0816](#) [TGP3000ULM-0.080-02-0816](#) [SIL-PAD K6 300MMX300MM SHEET](#) [GP1500-0.200-02-0816](#) [SP980-0.009-00-1212](#) [GPEMI1.0-0.100-01-0816](#) [GPA3000-0.125-01-0816](#) [TGP12000ULM-0.100-00-0808](#) [TGP12000ULM-0.060-00-0808](#) [TGP3000ULM-0.120-02-0816](#) [803263](#) [GP1000SF-0.100-02-0816](#) [GPHC1000-0.010-02-0816](#) [GP1500S30-0.100-02-0816](#) [LF2000-00-00-30CC](#) [TGP3000ULM-0.100-02-0816](#) [TGP12000ULM-0.125-00-0808](#) [803269](#) [2015-54](#) [GPVOUS-0.080-00-4/4](#) [SP1200-0.016-AC-1212](#) [HF625-0.005-AC-1212](#) [SPA1500-0.010-00-4/4](#) [GP1500S30-0.250-02-0816](#) [SPA2000-0.015-AC-1012](#) [GP3500ULM-G-0.080-12-0816](#) [GPVO-0.160-01-0816](#) [GP1500S30-0.125-02-0816](#) [BP660P-0.008-00-1112](#) [LF3800LVO-00-150CC](#) [803790](#) [803266](#) [BP100-0.005-00-1/1](#) [SP1200-0.012-AC-1212](#) [SP1500ST-0.012-02-1012](#) [GP3500ULM-0.100-02-0816](#) [GF2000-00-600-50CC](#) [803262](#) [GPVOUS-0.160-AC-0816](#) [GPVOUS-B-0.040-01-0816](#) [803268](#)