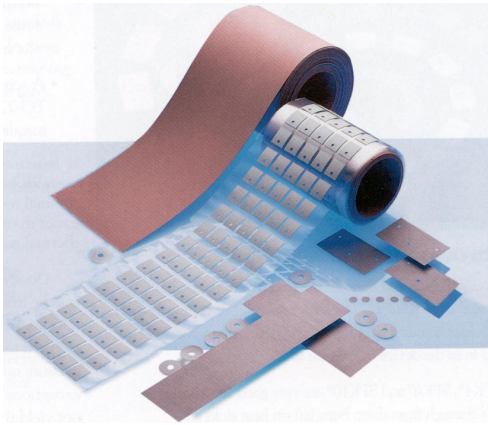


Features and Benefits

- Thermal impedance
1.13°C-in²/W (@50 psi)
- Original sil-pad material
- Excellent mechanical and physical characteristics
- Flame retardant



Sil-Pad 400 is a composite of silicone rubber and fiberglass. It is flame retardant and is specially formulated for use as a thermally conductive insulator. Primary use is to electrically isolate power sources from heat sinks.

Sil-Pad 400 has excellent mechanical and physical characteristics. Surfaces are pliable and allow complete surface contact with excellent heat dissipation. Sil-Pad 400 actually improves its thermal resistance with age. The reinforcing fiberglass gives excellent cut-through resistance and Sil-Pad 400 is non-toxic and resists damage from cleaning agents.

MIL SPEC. MIL-M-38527/8A
MIL-M-38527C
MIL-I-49456
MIL-M-87111
U.L. FILE NUMBER E59150
FSCM NUMBER 55285

Typical Properties of Sil-Pad 400						
Property	Imperial Value	Metric Value	Test Method			
Color	Gray	Gray	Visual			
Reinforcement Carrier	Fiberglass	Fiberglass	***			
Thickness, (inch) / (mm)	0.007, 0.009	0.178, 0.229	ASTM D374			
Hardness, (Shore A)	85	85	ASTM D2240			
Breaking Strength, (lbs./inch) / (kN/m)	100	18	ASTM D1458			
Elongation, (%45° to Warp & Fill)	40	40	ASTM D412			
Tensile Strength, (psi) / (Mpa)	3000	20	ASTM D412			
Continuous Use Temp., (°F) / (°C)	-76 to 356	-60 to 180	***			
Electrical	Imperial Value	Metric Value	Test Method			
Dielectric Breakdown Voltage, (VAC)	3500, 4500	3500, 4500	ASTM D149			
Dielectric Constant, (1000 Hz)	5.5	5.5	ASTM D150			
Volume Resistivity, (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D257			
Flame Rating	94 V-O	94 V-O	U.L.			
Thermal	Imperial Value	Metric Value	Test Method			
Thermal Conductivity, (W/m-K)	0.9	0.9	ASTM D5470			
Thermal Impedance vs. Pressure						
	Pressure (psi)	10	25	50	100	200
TO-220 Thermal Performance, (°C/W)	0.007"	6.62	5.93	5.14	4.38	3.61
TO-220 Thermal Performance, (°C/W)	0.009"	8.51	7.62	6.61	5.63	4.64
Thermal Impedance, (°C-in ² /W) (I)	0.007"	1.82	1.42	1.13	0.82	0.54
Thermal Impedance, (°C-in ² /W) (I)	0.009"	2.34	1.83	1.45	1.05	0.69

1). The ASTM D5470 (Bergquist Modified) test fixture was used. The recorded value includes interfacial thermal resistance. These values are given to the customer 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
- Power semiconductors

Configurations

Available:

- Sheet form
- Die-Cut parts
- Roll form
- With or without pressure sensitive adhesive

We produce thousands of specials. Tooling charges vary depending on tolerances and complexity of the part.

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

Product Data Sheet / PDS-0602-001-01; Rev 01