

Gap Pad® 1000SF

Thermally Conductive, Silicone-Free Gap Filling Material

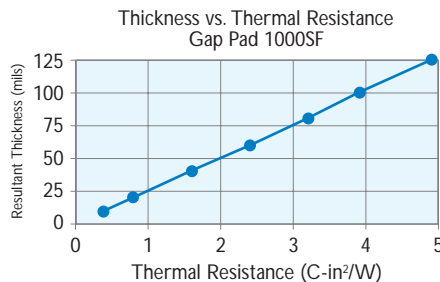
Features and Benefits

- Thermal conductivity: 0.9 W/m-K
- No silicone outgassing
- No silicone extraction
- Reduced tack on one side to aid in application assembly
- Electrically isolating



The new Gap Pad 1000SF is a thermally conductive, electrically insulating, silicone-free polymer specially designed for silicone-sensitive applications. The material is ideal for applications with high standoff and flatness tolerances. Gap Pad 1000SF is reinforced for easy material handling and added durability during assembly. The material is available with a protective liner on both sides of the material. The topside has reduced tack for ease of handling.

Note: Resultant thickness is defined as the final gap thickness of the application.



TYPICAL PROPERTIES OF GAP PAD 1000SF			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Green	Green	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.010 to 0.125	0.254 to 3.175	ASTM D374
Inherent Surface Tack (1- or 2-sided)	2	2	—
Density (g/cc)	2.0	2.0	ASTM D792
Heat Capacity (J/g-K)	1.1	1.1	ASTM E1269
Hardness, Bulk Rubber (Shore 00) (1)	40	40	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	34	234	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 257	-60 to 125	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>6000	>6000	ASTM D149
Dielectric Constant (1000 Hz)	5.0	5.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 ¹⁰	10 ¹⁰	ASTM D257
Flame Rating	V-1	V-1	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	0.9	0.9	ASTM D5470

1) Thirty second delay value Shore 00 hardness scale.
2) Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch². For more information on Gap Pad modulus, refer to Bergquist Application Note #116.

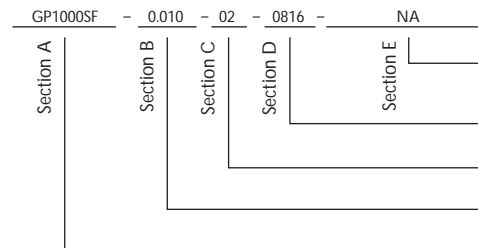
Typical Applications Include:

- Digital disk drives / CD-ROM
- Automotive modules
- Fiber optics modules

Configurations Available:

- Sheet form
- Die-cut parts

Building a Part Number



Note: To build a part number, visit our website at www.bergquistcompany.com.

Standard Options

- ◀ example
- NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.
- 0806 = Standard sheet size 8" x 16", or
00 = custom configuration
- 02 = Natural tack, both sides
- Standard thicknesses available: 0.010", 0.015", 0.020", 0.040", 0.060", 0.080", 0.100", 0.125"
- GP1000SF = Gap Pad 1000SF Material

Gap Pad®: U.S. Patent 5,679,457 and others



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