

Gap Pad® A2000

High Performance, Thermally Conductive Gap Filling Material

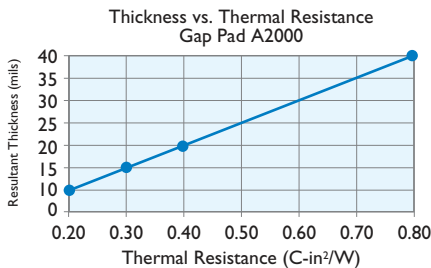
Features and Benefits

- Thermal conductivity: 2.0 W/m-K
- Fiberglass reinforced for puncture, shear and tear resistance
- Electrically isolating



Gap Pad A2000 acts as a thermal interface and electrical insulator between electronic components and heat sinks. In the thickness range of 10 to 40 mil, Gap Pad A2000 is supplied with natural tack on both sides, allowing for excellent compliance to the adjacent surfaces of components. The 40 mil material thickness is supplied with lower tack on one side, allowing for burn-in processes and easy rework.

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



TYPICAL PROPERTIES OF GAP PAD A2000			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Gray	Gray	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.010 to 0.040	0.254 to 1.016	ASTM D374
Inherent Surface Tack (1 side)	2	2	—
Density (Bulk Rubber) (g/cc)	2.9	2.9	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) (1)	80	80	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	55	379	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>4000	>4000	ASTM D149
Dielectric Constant (1000 Hz)	6.0	6.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	2.0	2.0	ASTM D5470
THERMAL PERFORMANCE vs. STRAIN			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in ² /W) 0.040" (3)	1.04	1.00	0.95

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. 3) 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:

- Computer and peripherals; between CPU and heat spreader
- Telecommunications
- Heat pipe assemblies
- RDRAM™ memory modules
- CDROM / DVD cooling
- Areas where heat needs to be transferred to a frame chassis or other type of heat spreader
- DDR SDRAM memory modules

Configurations Available:

- Sheet form, die-cut parts and roll form (converted or unconverted)

Building a Part Number Standard Options

GPA2000 - 0.010 - 02 - 0816 - NA					◀ example
Section A	Section B	Section C	Section D	Section E	NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.
					0816 = 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"
					GPA2000 = Gap Pad A2000 Material

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



www.bergquistcompany.com

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