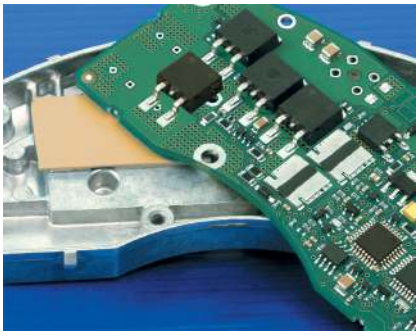
Gap Pad® A3000

Thermally Conductive, Reinforced Gap Filling Material

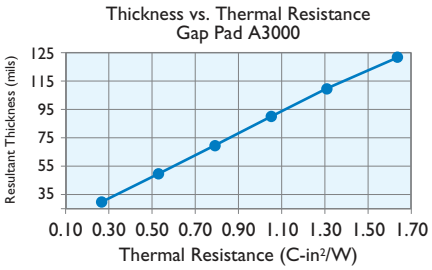
Features and Benefits

- Thermal conductivity: 2.6 W/m-K
- Fiberglass reinforced for puncture, shear and tear resistance
- Reduced tack on one side to aid in application assembly
- Electrically isolating



Gap Pad A3000 is a thermally conductive, filled-polymer laminate, supplied on a reinforcing mesh for added electrical isolation, easy material handling and enhanced puncture, shear and tear resistance. Gap Pad A3000 has a reinforcement layer on the dark gold side of the material that assists in burn-in and rework processes while the light gold and soft side of the material allows for added compliance.

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



TYPICAL PROPERTIES OF GAP PAD A3000

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Gold	Gold	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.015 to 0.125	0.381 to 3.175	ASTM D374
Inherent Surface Tack (1 side)	1	1	—
Density (Bulk Rubber) (g/cc)	3.2	3.2	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)	50	344	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>5000	>5000	ASTM D149
Dielectric Constant (1000 Hz)	7.0	7.0	ASTM D150
Volume Resistivity (Ohm-meter)	10^{10}	10^{10}	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	2.6	2.6	ASTM D5470
THERMAL PERFORMANCE vs. STRAIN			
Deflection (% strain)	**10**	**20**	**30**
Thermal Impedance (°C-in²/W) 0.040" (3)	0.78	0.73	0.68

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
- Heat pipe assemblies
- CDROM / DVD cooling
- Telecommunications
- RDRAM™ memory modules
- Between CPU and heat spreader
- Area where heat needs to be transferred to a frame, chassis or other type of heat spreader

Configurations Available:

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

Building a Part Number

GPA3000 – 0.015 – 01 – 0816 – NA

- Section A: GPA3000 = Gap Pad A3000 Material
- Section B: Standard thicknesses available: 0.015", 0.020", 0.040", 0.060", 0.080", 0.100", 0.125"
- Section C: 01 = Natural tack, one side
- Section D: 0816 = Standard sheet size 8" x 16", or 00 = custom configuration
- Section E: NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

Standard Options

◂◂ *example*

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

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