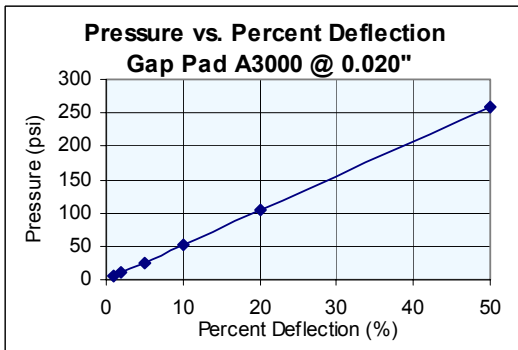


Features and Benefits

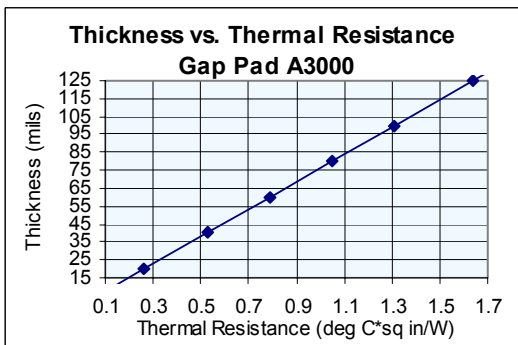
- Thermal conductivity 3.0 W/m-K
- Enhanced puncture, shear, and tear resistance
- Electrically isolating
- One-sided inherent surface tack for stick-in-place characteristics

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. Gap Pad A3000 is a thermally conductive filled polymer laminate, supplied on a reinforcing mesh for easy material handling and enhanced puncture, shear, and tear resistance.

To calculate the approximate amount of deflection for a specific material thickness, at a given pressure, refer to the graph below. Multiply the thickness of the material by the percentage at the given pressure.*



The resultant thickness of the Gap Pad will determine the thermal resistance. Subtracting the initial gap pad thickness by the deflection value, obtained above, will give the resultant thickness. Refer to the graph below to obtain the thermal resistance of the material.



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 or 2 sided	I	I	***
Density, (g/cc)	3.2	3.2	ASTM D792
Heat Capacity, (J/g-K)	1.0	1.0	ASTM C351
Hardness, bulk rubber, (Shore 00)	80	80	ASTM D2240
Young's Modulus, (psi)/(kPa) (I)	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 ¹¹	10 ¹¹	ASTM D257
Flame Rating	94 V-O	94 V-O	U.L.
Thermal			
Thermal Conductivity, (W/m-K)	3.0	3.0	ASTM D5470

1) Graphs and data generated from Young's Modulus, calculated using 0.01 inch/min. step rate of strain with a sample size of 0.79 inch² on 0.020" material. For more information on Gap Pad modulus refer to Bergquist Application Note #116.

Typical Applications Include

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

Configurations

Available:

- Sheet form
- Die-Cut parts
- Roll form (converted or unconverted)
- Standard sheet size is 8" x 16"
- Standard thickness of:
0.015", 0.020", 0.040", 0.060", 0.080", 0.100" and 0.125"

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

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

[Product Data Sheet / PDS-GP-A3000-093003](#)