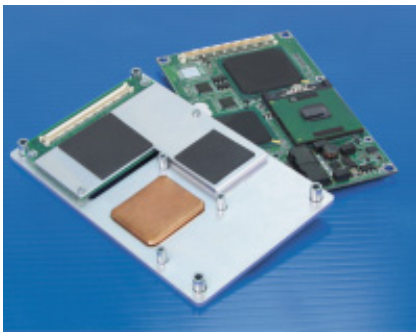
Gap Pad® 1500

Thermally Conductive, Unreinforced Gap Filling Material

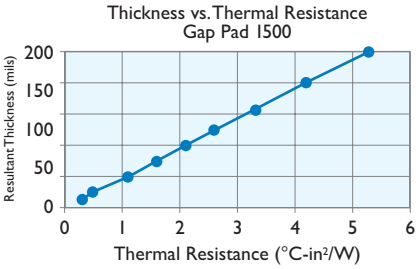
Features and Benefits

- Thermal conductivity: 1.5 W/m-K
- Unreinforced construction for additional compliancy
- Conformable, low hardness
- Electrically isolating



Gap Pad 1500 has an ideal filler blend that gives its low-modulus characteristic that maintains optimal thermal performance yet still allows for easy handling. The natural tack on both sides of the material allows for good compliance to adjacent surfaces of components, minimizing interfacial resistance.

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



TYPICAL PROPERTIES OF GAP PAD 1500

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Black	Black	Visual
Reinforcement Carrier	—	—	—
Thickness (inch) / (mm)	0.020 to 0.200	0.508 to 5.080	ASTM D374
Inherent Surface Tack (1- or 2-sided)	2	2	—
Density (g/cc)	2.1	2.1	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness, Bulk Rubber (Shore 00) (1)	40	40	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	45	310	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>6000	>6000	ASTM D149
Dielectric Constant (1000 Hz)	5.5	5.5	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)	1.5	1.5	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:

- Telecommunications
- Computer and peripherals
- Power conversion
- RDRAM™ memory modules / chip scale packages
- Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader

Configurations Available:

- Sheet form and die-cut parts

Building a Part Number

GP1500 – 0.100 – 02 – 0816 – NA

Section A: GP1500 = Gap Pad 1500 Material

Section B: 0.100 = Standard thicknesses available: 0.020", 0.040", 0.060", 0.080", 0.100", 0.125", 0.160", 0.200"

Section C: 02 = Natural tack, both sides

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.

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

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