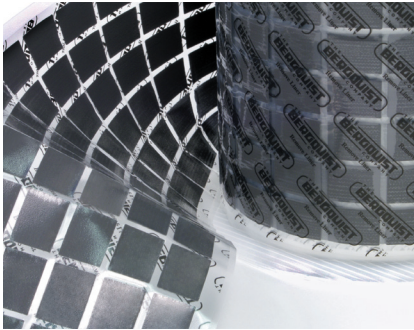


# Gap Pad® I500R

Thermally Conductive, Reinforced Gap Filling Material

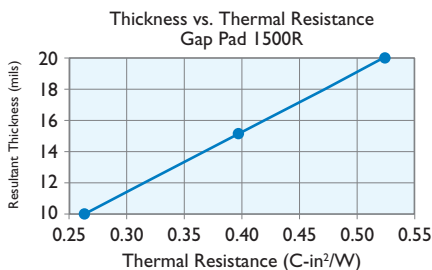
## Features and Benefits

- Thermal conductivity: 1.5 W/m-K
- Fiberglass reinforced for puncture, shear and tear resistance
- Easy release construction
- Electrically isolating



Gap Pad I500R has the same highly conformable, low-modulus polymer as the standard Gap Pad I500. The fiberglass reinforcement allows for easy material handling and enhances puncture, shear and tear resistance. The natural tack on both sides of the material allows for good compliance to mating surfaces of components, further reducing thermal resistance.

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



TYPICAL PROPERTIES OF GAP PAD I500R			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Black	Black	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.010 to 0.020	0.254 to 0.508	ASTM D374
Inherent Surface Tack (1 side)	2	2	—
Density (Bulk Rubber) (g/cc)	2.1	2.1	ASTM D792
Heat Capacity (J/g-K)	1.3	1.3	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	—
<b>ELECTRICAL</b>			
Dielectric Breakdown Voltage (Vac)	>6000	>6000	ASTM D149
Dielectric Constant (1000 Hz)	6.0	6.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D257
Flame Rating	V-O	V-O	UL 94
<b>THERMAL</b>			
Thermal Conductivity (W/m-K)	1.5	1.5	ASTM D5470
<b>THERMAL PERFORMANCE vs. STRAIN</b>			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in <sup>2</sup> /W) 0.020" (3)	1.07	0.88	0.82

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 inch<sup>2</sup>. 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.

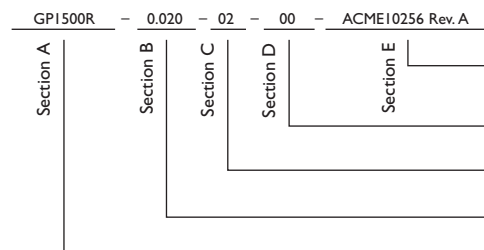
## Typical Applications Include:

- Telecommunications
- Computer and peripherals
- Power conversion
- RDRAM™ memory modules / chip scale packages
- Areas 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



## Standard Options

- ◀ example
- 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"
  - GPI500R = Gap Pad I500R Material

Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).



[www.bergquistcompany.com](http://www.bergquistcompany.com)

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