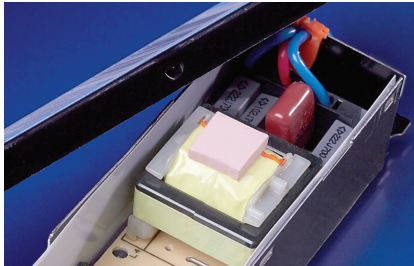


Highly Conformable, Thermally Conductive, Reworkable Gap Filling Material

## Features and Benefits

- Thermal Conductivity: 1.3 W/m-K (Bulk Rubber)
- Permanent liner reinforcement allows easy rework and resistance to puncture and tear resistance
- Highly conformable/low hardness
- Low strain on fragile components

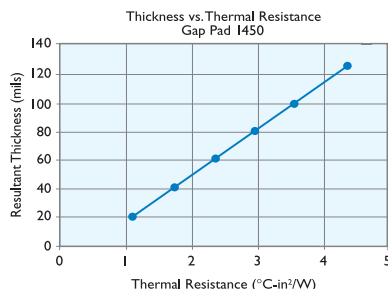


Gap Pad® I450 is a highly compliant Gap Pad material that is ideal for fragile component leads. The material includes a permanent liner, which facilitates rework and improves puncture resistance and handling characteristics. The un-lined side of Gap Pad® I450 maintains a conformable, yet elastic nature that provides excellent interfacing and wet-out characteristics, even to surfaces with high roughness or uneven topography.

Gap Pad® I450 has inherent tack on one side of the material, eliminating the need for thermally impeding adhesive layers.

It is highly recommended that the permanent liner be left intact. Gap Pad® I450 permanent clear liner can also be removed if needed for thicknesses above 60 mil. Removing the clear permanent liner will not have significant impact on thermal performance.

Please contact your local Bergquist Sales Representative for sample inquiries and additional product information.



TYPICAL PROPERTIES OF GAP PAD I450			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Light Pink	Light Pink	Visual
Reinforcement Carrier	Permanent Liner	Permanent Liner	—
Thickness (inch) / (mm)	0.020 to 0.125	0.508 to 3.175	ASTM D374
Inherent Surface Tack (1 side)	I	I	—
Density (Bulk Rubber) (g/cc)	1.8	1.8	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) (1)	30	30	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	16	110	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 302	-60 to 150	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>6000	>6000	ASTM D149
Dielectric Constant (1000 Hz)	5.0	5.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>9</sup>	10 <sup>9</sup>	ASTM D257
Flame Rating	V-0	V-0	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	1.3	1.3	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 inch<sup>3</sup>.

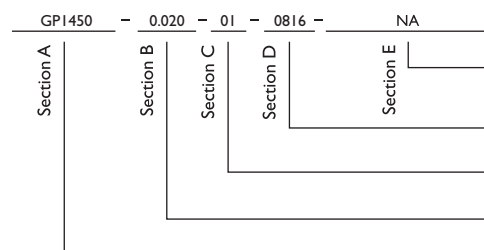
## Typical Applications:

- Lighting and LED applications
- Low strain is required for fragile component leads
- Computer and peripherals
- Telecommunications
- Between any heat-generating semiconductor and a heat sink

## Configurations Available:

- Sheet form and die-cut parts

## Building a Part Number



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

## 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

01 = Natural tack, one side

Standard thickness available: 0.020", 0.040", 0.060"  
0.080", 0.100", 0.125"

GPI450 = Gap Pad I450 Material



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

The Bergquist Company -  
North American Headquarters  
18930 West 78th Street  
Chanhassen, MN 55317  
Phone: 800-347-4572  
Fax: 952-835-0430

The Bergquist Company -  
European Headquarters  
Netherlands  
Phone: 31-35-5380684  
Fax: 31-35-5380295

The Bergquist Company -  
Asia Headquarters  
Hong Kong  
Phone: 852-2690-9296  
Fax: 852-2690-3408

All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY AND FITNESS FOR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser nor contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.