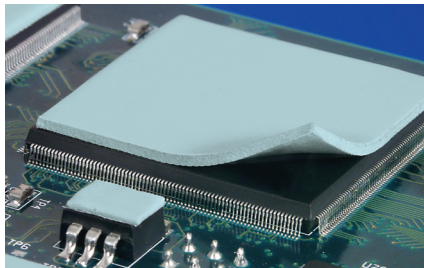


# Gap Pad® 5000S35

High thermal conductivity plus "S-Class" softness and conformability

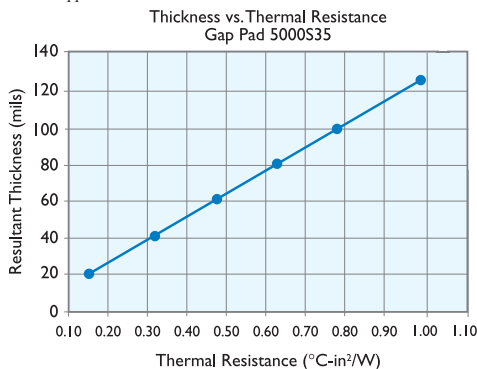
## Features and Benefits

- High thermal conductivity: 5 W/m-K
- Highly conformable, "S-Class" softness
- Natural inherent tack reduces interfacial thermal resistance
- Conforms to demanding contours and maintains structural integrity with little or no stress applied to fragile component leads
- Fiberglass reinforced for puncture, shear and tear resistance
- Excellent thermal performance at low pressures



Gap Pad 5000S35 is a fiberglass-reinforced filler and polymer featuring a high thermal conductivity. The material yields extremely soft characteristics while maintaining elasticity and conformability. The fiberglass reinforcement provides easy handling and converting, added electrical isolation and tear resistance. The inherent natural tack on both sides assists in application and allows the product to effectively fill air gaps, enhancing the overall thermal performance. The top side has reduced tack for ease of handling. Gap Pad 5000S35 is ideal for high-performance applications at low mounting pressures.

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



TYPICAL PROPERTIES OF GAP PAD 5000S35			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Light Green	Light Green	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.020 to 0.125	0.508 to 3.175	ASTM D374
Inherent Surface Tack (1 side)	2	2	—
Density (Bulk Rubber) (g/cc)	3.6	3.6	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) (1)	35	35	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	17.5	121	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
<b>ELECTRICAL</b>			
Dielectric Breakdown Voltage (Vac)	>5000	>5000	ASTM D149
Dielectric Constant (1000 Hz)	7.5	7.5	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>9</sup>	10 <sup>9</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
<b>THERMAL</b>			
Thermal Conductivity (W/m-K)	5.0	5.0	ASTM D5470
<b>THERMAL PERFORMANCE vs. STRAIN</b>			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in²/W) 0.040" (3)	0.41	0.34	0.30

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.

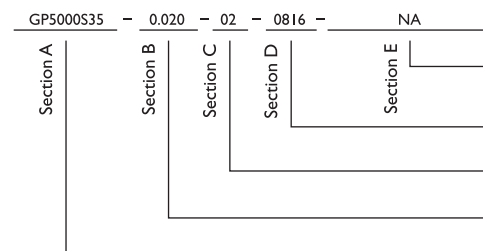
## Typical Applications

- CDROM / DVD ROM
- Voltage Regulator Modules (VRMs) and POLs
- Thermally-enhanced BGAs
- Memory packages / modules
- PC Board to chassis
- ASICs and DSPs

## Configurations Available:

- Die-cut parts are available in any shape or size, separated or in sheet form

## 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

02 = Natural tack, both sides

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

GP5000S35 = Gap Pad 5000S35 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: 852-2690-2344

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 not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.

PDS\_GP\_5000S35\_0711