Gap Pad® 3000S30

Thermally Conductive, Reinforced, Soft "S-Class" Gap Filling Material

Features and Benefits

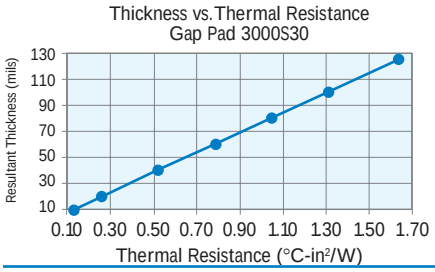
- Thermal conductivity: 3.0 W/m-K
- Low "S-Class" thermal resistance at very low pressures
- Highly conformable, "S-Class" softness
- Designed for low-stress applications
- Fiberglass reinforced for puncture, shear and tear resistance



Gap Pad 3000S30 is a soft gap filling material rated at a thermal conductivity of 3 W/m-K. The material offers exceptional thermal performance at low pressures due to an all-new 3 W/m-K filler package and low-modulus resin formulation. It is reinforced to enhance material handling, puncture, shear and tear resistance. It is well suited for high performance, low-stress applications that typically use fixed standoff or clip mounting. A conformable yet elastic nature that allows for excellent interfacing and wet-out characteristics, even to rough surfaces and/or topography.

Gap Pad 3000S30 is offered with natural inherent tack on both sides of the material, eliminating the need for thermally-impeding adhesive layers. The material's natural inherent tack allows for stick-in-place characteristics during assembly. Gap Pad 3000S30 is supplied with protective liners on both sides.

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



TYPICAL PROPERTIES OF GAP PAD 3000S30

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Light Blue	Light Blue	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)	0.010 to 0.125	0.254 to 3.175	ASTM D374
Inherent Surface Tack (1- or 2-sided)	2	2	—
Density (g/cc)	3.2	3.2	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness 40-125 mil (Shore 00) (1)	30	30	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	26	180	ASTM D575
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>3000	>3000	ASTM D149
Dielectric Constant (1000 Hz)	7.0	7.0	ASTM D150
Volume Resistivity (Ohm-meter)	10^9	10^9	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	3.0	3.0	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:

- Processors
- Server S-RAMs
- Mass storage drives
- Wireline/wireless communications hardware
- Notebook computers
- BGA packages
- Power conversion

Configurations Available:

- Sheet form and die-cut parts available

Building a Part Number

GP3000S30 – 0.020 – 02 – 0816 – ACME 89302 Rev a

Section A: GP3000S30 = Gap Pad 3000S30 Material

Section B: Standard thicknesses available: 0.010", 0.015", 0.020", 0.040", 0.060", 0.080", 0.100", 0.125"

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.

THE BERGQUIST COMPANY

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 - Europe
Bramenberg 9a, 3755 BT Eemnes
Netherlands
Phone: 31-35-5380684
Fax: 31-35-5380295

The Bergquist Company - China
Rm. 7C, Aihe Mansion
No. 629 Ling Ling Road
Shanghai, China 200030
Ph: 86-21-6464-2206
Fax: 86-21-6464-2209

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