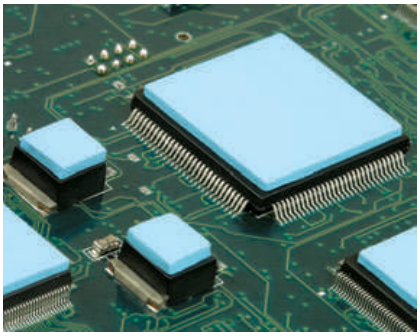
Gap Pad® 3000S30

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

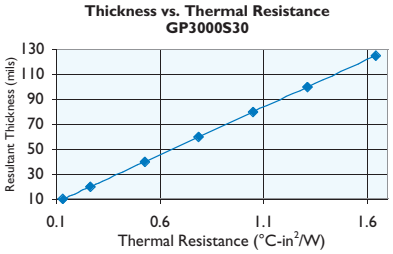
Features and Benefits

- Thermal conductivity = 3.0 W/mK
- Low S-Class thermal resistance at very low pressures
- Conformable low hardness
- Designed for low pressure applications
- Fiberglass reinforced for puncture, shear and tear resistance



Gap Pad 3000S30 is an all-new, high performance (3W/m-K) thermally conductive gap filling material. In addition to a high thermal conductivity value, Gap Pad 3000S30 offers exceptionally low interfacial resistances to adjacent surfaces. Featuring a soft, very low hardness specifically designed to comply to unique contours and topography, Gap Pad 3000S30 is ideal for fragile components. The material is reinforced allowing for easy part placement and handling. 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 C351
Hardness 10-20 mil (Shore 00) (1)	55	55	ASTM D2240
Hardness 40-125 mil (Shore 00) (1)	30	30	ASTM D575
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)	2500 min	2500 min	ASTM D149
Dielectric Constant (1000 Hz)	6.0	6.0	ASTM D150
Volume Resistivity (Ohm-meter)	8.5^{10}	8.5^{10}	ASTM D257
Flame Rating (pending)	94 V-O	94 V-O	U.L.
THERMAL			
Thermal Conductivity (W/m-K)	3.0	3.0	ASTM D5470

1) One 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:

- Die cut parts in any shape or size, separated or in sheet form
- Custom sizes available — contact Bergquist Product Management

Building a Part Number

GP3000S30 - 0.020 - 02 - 0816 - NA

Section A: GP3000S30 = Gap Pad 3000S30

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

Section C: 02 = Naturally tacky both sides

Section D: 0816 = Standard sheet size 8" X 16", 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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