

# **Gap Pad® 5000S35**

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### PRODUCT DESCRIPTION

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

### **FEATURES AND BENEFITS**

- · High thermal conductivity: 5.0 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 fiberglassreinforced 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: To build a part number, visit our website at www.bergquistcompany.com.

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			
ELECTRICAL					
Dielectric Breakdown Voltage (Vac)	>5000	>5000		ASTM D149	
Dielectric Constant (1000 Hz)	7.5	7.5		ASTM D150	
Volume Resistivity (Ohm-meter)	109	I O <sup>9</sup>		ASTM D257	
Flame Rating	V-O	V-O		U.L. 94	
THERMAL					
Thermal Conductivity (W/m-K)	5.0	5.0		ASTM D5470	
THERMAL PERFORMANCE vs. STRAIN					
	Deflection (% strain)		10	20	30
Thermal Impedance (°C-in²/W) 0.040" (3)			0.32	0.29	0.25

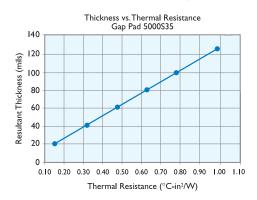
1) Thirty second delay value Shore 00 hardness scale. 2)Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch<sup>2</sup>. 3) The ASTM D5470 test fixture was used. The recorded value includes interfacial thermal resistance. These values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

#### TYPICAL APPLICATIONS INCLUDE

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

## **CONFIGURATIONS AVAILABLE**

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



PDS GP 5000S35 0115



#### Disclaimer

#### Note:

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Reference 0.1