

# **Gap Pad® 2000S40**

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## PRODUCT DESCRIPTION

Highly Conformable, Thermally Conductive, Reinforced "S-Class" Gap Filling Material

# **FEATURES AND BENEFITS**

- · Thermal conductivity: 2.0 W/m-K
- Low "S-Class" thermal resistance at very low pressures
- Highly conformable, low hardness
- Designed for low-stress applications
- Fiberglass reinforced for puncture, shear and tear resistance



Gap Pad® 2000S40 is recommended for low-stress applications that require a mid to high thermally conductive interface material. The highly conformable nature of the material allows the pad to fill in air voids and air gaps between PC boards and heat sinks or metal chassis with stepped topography, rough surfaces and high stack-up tolerances.

Gap Pad® 2000S40 is offered with inherent natural tack on both sides of the material allowing for stick-in-place characteristics during application assembly. The material is supplied with protective liners on both sides. The top side has reduced tack for ease of handling.

Note: To build a part number, visit our website at www.bergquistcompany.com.

PROPERTY	PERTIES OF GAP PAD 2000S40  IMPERIAL VALUE METRIC VALUE TEST METHOD				
Color	Gray	Gray		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)	2.9	2.9		ASTM D792	
Heat Capacity (J/g-K)	0.6	0.6		ASTM E1269	
Hardness (Bulk Rubber) (Shore 00) (1)	30	30		ASTM D2240	
Young's Modulus (psi) / (kPa) (2)	45	310		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)	6.0	6.0		ASTM D I 50	
Volume Resistivity (Ohm-meter)	1011	1011		ASTM D257	
Flame Rating	V-O	V-O		U.L. 94	
THERMAL					
Thermal Conductivity (W/m-K)	2.0	2.0		ASTM D5470	
THERMAL PERFORMANCE vs. STR	AIN				
	Deflection (% strain)			20	30
Thermal Impedance (°C-in²/W) 0.040" (3) 0.97				0.89	0.80

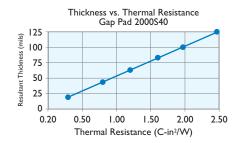
I) Thirty second delay value Shore 00 hardness scale. 2) Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch<sup>2</sup>. 3) The ASTM DS470 test fixture was used. The recorded value includes interfacial thermal resistance. These values are provided for reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

# TYPICAL APPLICATIONS INCLUDE

- Power electronics DC/DC; 1/4, 1/2, full bricks, etc.
- · Mass storage devices
- · Graphics card/processor/ASIC
- · Wireline/wireless communications hardware
- Automotive engine/transmission controls

## **CONFIGURATIONS AVAILABLE**

· Sheet form and die-cut parts



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### Disclaimer

#### Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 0.1