

Gap Pad® 1000HD

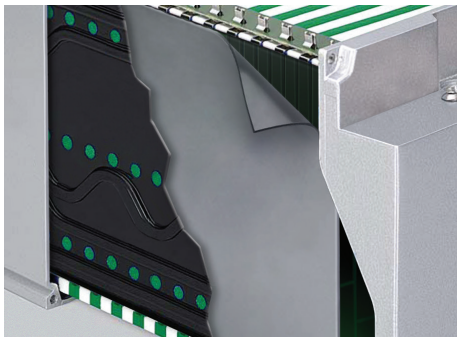
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PRODUCT DESCRIPTION

Highly Durable, Conformable, Thermally Conductive, Gap Filling Material

FEATURES AND BENEFITS

- Thermal Conductivity: 1.0 W/m-K
- Designed for high durability applications
- Robust Polyimide carrier provides excellent voltage breakdown, puncture and tear resistance
- Highly conformable
- Ease of handling and rework in applications



Gap Pad® 1000HD was designed to withstand applications requiring high durability.

The coated polyimide carrier on one side of the material allows easy rework, excellent handling characteristics and puncture resistance.

The conformable and elastic nature of Gap Pad® 1000HD allows excellent interfacing and wet-out characteristics, even to surfaces with a high degree of roughness or uneven topography.

The asymmetric construction of Gap Pad® 1000HD provides minimal tack on the polyimide side, with high inherent tack on the upcoated side. Gap Pad® 1000HD can be assembled with manual or automated processes.

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

TYPICAL PROPERTIES OF GAP PAD 1000HD

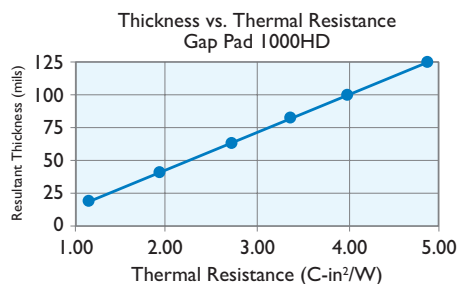
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Gray/Black	Gray/Black	Visual
Reinforcement Carrier	Polyimide	Polyimide	—
Thickness (inch) / (mm)	0.020 to 0.125	0.508 to 3.175	ASTM D374
Inherent Surface Tack (1- or 2-sided)	I	I	—
Density (g/cc)	2.1	2.1	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness, Bulk Rubber (Shore 00) (1)	40	40	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	60	414	ASTM D575
Continuous Use Temp. (°C)	-76 to 358	-60 to 180	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac)	>10,000	>10,000	ASTM D149
Dielectric Constant (1000 Hz)	5.5	5.5	ASTM D150
Volume Resistivity (Ohm-meter)	10 ¹¹	10 ¹¹	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	1.0	1.0	ASTM D5470
THERMAL PERFORMANCE vs. STRAIN			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in ² /W) 0.040" (3)	1.70	1.59	1.47
(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 ² . (3) The ASTM D5470 test fixture was utilized. The recorded values 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

- High durability applications
- Automotive energy storage: Ultra capacitors, batteries, power transmissions, power inverters
- Industrial automotive applications such as trucks, busses and trains
- Computer and peripherals
- Telecommunications
- Between any heat-generating device and a heat sink

CONFIGURATIONS AVAILABLE

- Sheet form and die-cut parts



PDS_GP_1000HD_0513

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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