

Gap Pad® HC 5.0

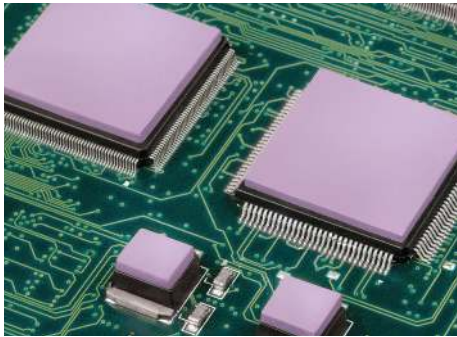
June 2016

PRODUCT DESCRIPTION

Highly Conformable, Thermally Conductive, Low Modulus Material

FEATURES AND BENEFITS

- Thermal Conductivity: 5.0 W/m-K
- High-compliance, low compression stress
- Fiberglass reinforced for shear and tear resistance



GAP PAD™ HC 5.0 is a soft and compliant gap filling material with a thermal conductivity of 5.0 W/m-K. The material offers exceptional thermal performance at low pressures due to a unique filler package and low-modulus resin formulation. The enhanced material is ideal for applications requiring low stress on components and boards during assembly. GAP PAD™ HC 5.0 maintains a conformable nature that allows for excellent interfacing and wet-out characteristics, even to surfaces with high roughness and/or topography.

GAP PAD™ HC 5.0 is offered with natural inherent tack on both sides of the material, eliminating the need for thermally-impeding adhesive layers. The top side has minimal tack for ease of handling. GAP PAD™ HC 5.0 is supplied with protective liners on both sides.

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

TYPICAL PROPERTIES OF GAP PAD HC 5.0

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Violet	Violet	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (inch) / (mm)*	0.020, 0.040, 0.060, 0.080, 0.100, 0.125	0.508, 1.016, 1.524, 2.032, 2.540, 3.175	ASTM D374
Inherent Surface Tack	2	2	—
Density (Bulk Rubber) (g/cc)	3.2	3.2	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) (4)	35	35	ASTM 2240
Young's Modulus (psi) / (kPa) (1)	17.5	121	ASTM D575
Typical Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac) (3)	5000	5000	ASTM D149
Dielectric Constant (1000 Hz)	8.0	8.0	ASTM D150
Volume Resistivity (Ohm-meter)	10 ¹⁰	10 ¹⁰	ASTM D257
Flame Rating	V-O	V-O	U.L.94
THERMAL			
Thermal Conductivity (W/m-K) (2)	5.0	5.0	ASTM D5470
THERMAL PERFORMANCE vs. STRAIN			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in ² /W) 0.040" (2)	0.35	0.30	0.26

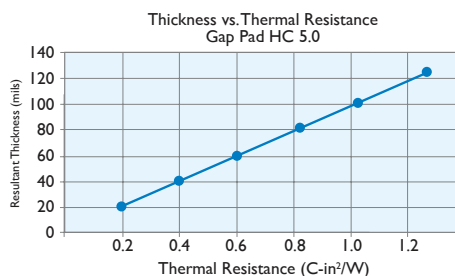
* Custom thicknesses available. Please contact your Henkel Sales Representative for more information.
 1) Young's Modulus, calculated using 0.01 in/min. step rate of strain with a sample size of 0.79 inch² after 5 minutes of compression at 10% strain on a 1mm thickness material.
 2) The ASTM D5470 test 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.
 3) Minimum value at 20 mil.
 4) Thirty second delay value on Shore 00 hardness scale.

TYPICAL APPLICATIONS INCLUDE

- Telecommunications
- ASICs and DSPs
- Consumer electronics
- Thermal modules to heat sinks

CONFIGURATIONS AVAILABLE

- Sheet form and die-cut parts



Disclaimer

Note:

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