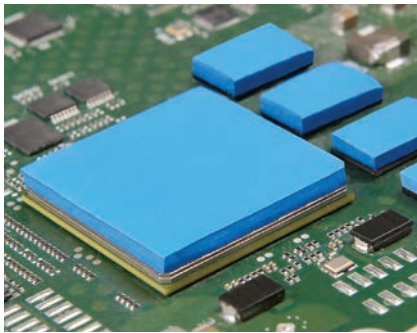


GAP PAD HC 3.0

High-Compliance, Thermally Conductive, Low Modulus Material

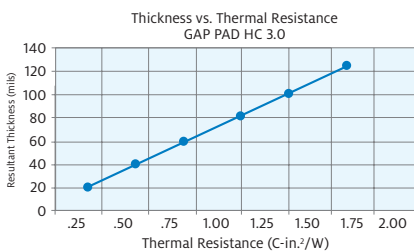
Features and Benefits

- Thermal conductivity: 3.0 W/m-K
- High-compliance, low compression stress
- Fiberglass-reinforced for shear and tear resistance



GAP PAD HC 3.0 is a soft and compliant gap filling material with a thermal conductivity of 3.0 W/m-K. The material offers exceptional thermal performance at low pressures due to a unique 3.0 W/m-K 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 3.0 maintains a conformable nature that allows for quick recovery and excellent wet-out characteristics, even to surfaces with high roughness and/or topography.

GAP PAD HC 3.0 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 3.0 is supplied with protective liners on both sides.



TYPICAL PROPERTIES OF GAP PAD HC 3.0

PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Blue	Blue	Visual
Reinforcement Carrier	Fiberglass	Fiberglass	—
Thickness (in.) / (mm)	0.020 to 0.125	0.508 to 3.175	ASTM D374
Inherent Surface Tack	2	2	—
Density (Bulk Rubber) (g/cc)	3.1	3.1	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) ⁽⁴⁾	15	15	ASTM D2240
Young's Modulus (psi) / (kPa) ⁽¹⁾	16	110	ASTM D575
Continuous Use Temp. (°F) / (°C)	-76 to 392	-60 to 200	—
ELECTRICAL			
Dielectric Breakdown Voltage (Vac.) ⁽³⁾	>5,000	>5,000	ASTM D149
Dielectric Constant (1,000 Hz)	6.5	6.5	ASTM D150
Volume Resistivity (Ohmmeter)	10 ¹⁰	10 ¹⁰	ASTM D257
Flame Rating	V-0	V-0	UL 94
THERMAL			
Thermal Conductivity (W/m-K) ⁽²⁾	3.0	3.0	ASTM D5470
THERMAL PERFORMANCE VS. STRAIN			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in.²/W) 0.040 in. ⁽²⁾	0.57	0.49	0.44
<small>1) Young's Modulus, calculated using 0.01 in./min. step rate of strain with a sample size of 0.79 in.² after 5 minutes of compression at 10% strain on a 1 mm 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.</small>			

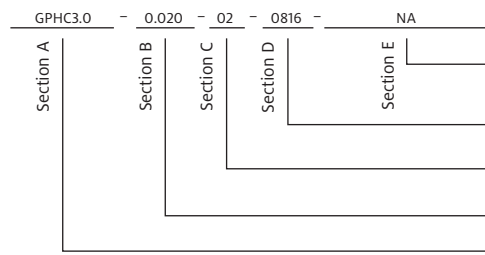
Typical Applications Include:

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

Configurations Available:

- Sheet form and die-cut parts

Building a Part Number



Standard Options

◀ example

NA = Selected standard option. If not selecting a standard option, insert company name, drawing number, and revision level.

0816 = Standard sheet size 8" x 16", or 00 = custom configuration

02 = Natural tack, both sides (With fiberglass)

Standard thicknesses available: 0.020", 0.040", 0.060", 0.080", 0.100", 0.125"

GPHC3.0 = GAP PAD HC 3.0 Material with fiberglass

Note: To build a part number, go to www.bergquistcompany.com/Part_Number_Builder.php.