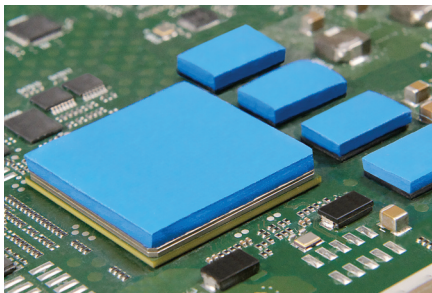


# Gap Pad® HC 3.0

High-Compliance, Thermally Conductive, Low Modulus Material

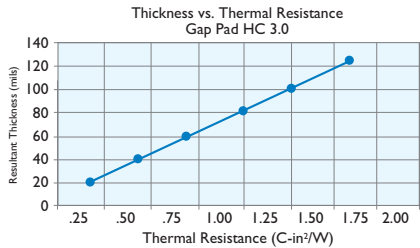
## Features and Benefits

- 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 (inch) / (mm)                                                                                                                                                                                                                                        | 0.010 to 0.125        | 0.254 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       | —           |
| <b>ELECTRICAL</b>                                                                                                                                                                                                                                              |                       |                  |             |
| Dielectric Breakdown Voltage (Vac) (3)                                                                                                                                                                                                                         | 5000                  | 5000             | ASTM D149   |
| Dielectric Constant (1000 Hz)                                                                                                                                                                                                                                  | 6.5                   | 6.5              | ASTM D150   |
| Volume Resistivity (Ohm-meter)                                                                                                                                                                                                                                 | 10 <sup>10</sup>      | 10 <sup>10</sup> | ASTM D257   |
| Flame Rating                                                                                                                                                                                                                                                   | V-O                   | V-O              | U.L. 94     |
| <b>THERMAL</b>                                                                                                                                                                                                                                                 |                       |                  |             |
| Thermal Conductivity (W/m-K) (2)                                                                                                                                                                                                                               | 3.0                   | 3.0              | ASTM D5470  |
| <b>THERMAL PERFORMANCE vs. STRAIN</b>                                                                                                                                                                                                                          |                       |                  |             |
|                                                                                                                                                                                                                                                                | Deflection (% strain) |                  |             |
|                                                                                                                                                                                                                                                                | 10                    | 20               | 30          |
| Thermal Impedance (°C-in²/W) 0.040" (2)                                                                                                                                                                                                                        | 0.57                  | 0.49             | 0.44        |
| 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) Typical value at 20 mil.                                                                                                                                                                                                                                    |                       |                  |             |
| 4) Thirty second delay value on Shore 00 hardness scale.                                                                                                                                                                                                       |                       |                  |             |

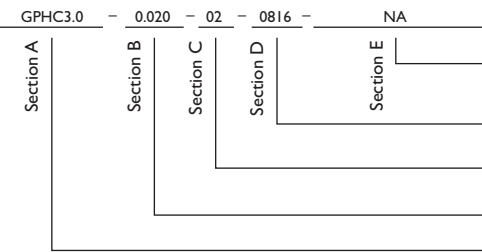
## Typical Applications Include:

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

## Configurations Available:

- Sheet form and die-cut parts

## 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: 0.010", 0.015", 0.020", 0.030", 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, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).

**BERGQUIST**

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PDS\_GC\_HC3\_0415

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Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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