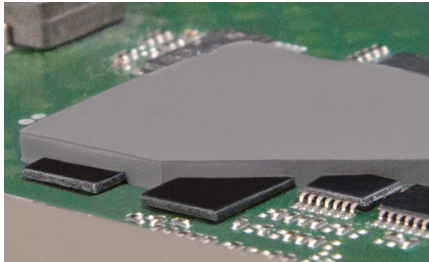


# Gap Pad® 3500ULM

Highly Conformable, Thermally Conductive, Ultra-Low Modulus Material

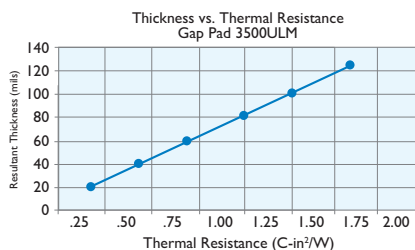
## Features and Benefits

- Thermal Conductivity: 3.5 W/m-K
- Fiberglass reinforced for shear and tear resistance
- Non-fiberglass option for applications that require an additional reduction in stress



Gap Pad® 3500ULM (ultra-low modulus) is an extremely soft gap filling material with a thermal conductivity of 3.5 W/m-K. The material offers exceptional thermal performance at low pressures due to a unique 3.5 W/m-K filler package and ultra-low modulus resin formulation. The enhanced material is well suited for high performance applications requiring extremely low assembly stress. Gap Pad® 3500ULM maintains a conformable nature that allows for excellent interfacing and wet-out characteristics, even to surfaces with high roughness and/or topography.

Gap Pad® 3500ULM is offered with and without fiberglass and has higher natural inherent tack on one side of the material, eliminating the need for thermally-impeding adhesive layers. The top side has minimal tack for ease of handling. Gap Pad® 3500ULM is supplied with protective liners on both sides.



## TYPICAL PROPERTIES OF GAP PAD 3500ULM

| PROPERTY                              | IMPERIAL VALUE              | METRIC VALUE                | TEST METHOD |
|---------------------------------------|-----------------------------|-----------------------------|-------------|
| Color                                 | Gray                        | Gray                        | Visual      |
| Reinforcement Carrier                 | Fiberglass or No fiberglass | Fiberglass or No fiberglass | —           |
| Thickness (inch) / (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  |
| Young's Modulus (psi) / (kPa) (1) (2) | 4                           | 27.5                        | —           |
| Continuous Use Temp (°F) / (°C)       | -76 to 392                  | -60 to 200                  | —           |

### ELECTRICAL

|                                    |                  |                  |           |
|------------------------------------|------------------|------------------|-----------|
| Dielectric Breakdown Voltage (Vac) | >5000            | >5000            | ASTM D149 |
| Dielectric Constant (1000 Hz) (3)  | 6.0              | 6.0              | 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   |

### THERMAL

|                              |     |     |            |
|------------------------------|-----|-----|------------|
| Thermal Conductivity (W/m-K) | 3.5 | 3.5 | ASTM D5470 |
|------------------------------|-----|-----|------------|

### THERMAL PERFORMANCE vs. STRAIN

| Deflection (% strain)                   | 10   | 20   | 30   |
|-----------------------------------------|------|------|------|
| Thermal Impedance (°C-in²/W) 0.040" (4) | 0.50 | 0.44 | 0.39 |

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) Thirty second delay value Shore 000 hardness scale is 70 for 125 mil.

3) Minimum value at 20 mil.

4) 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.

## Typical Applications Include:

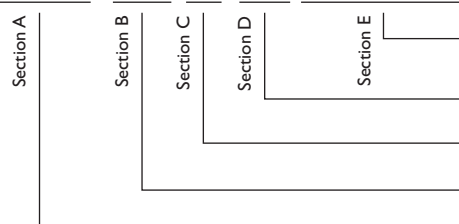
- Consumer electronics
- ASICs and DSPs
- Telecommunications
- PC applications

## Configurations Available:

- Sheet form and die-cut parts

## Building a Part Number

GP3500ULM - 0.020 - 02 - 0816 - NA



## 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 (Without Fiberglass)  
12 = Natural tack, both sides (With Fiberglass)  
05 = Non-tack, one side (Without Fiberglass), 7.87" x 15.75"  
15 = Non-tack, one side (With Fiberglass), 7.87" x 15.75"  
Standard thicknesses available: 0.020" (fiberglass only), 0.040", 0.060", 0.080", 0.100", 0.125"

GP3500ULM = Gap Pad 3500ULM Material without fiberglass  
GP3500ULM-G = Gap Pad 3500ULM Material with fiberglass  
(GP3500ULM and GP3500ULM-G are also offered in a NT, non-tack, version)

Note: To build a part number, visit our website at [www.bergquistcompany.com](http://www.bergquistcompany.com).



[www.bergquistcompany.com](http://www.bergquistcompany.com)

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PDS\_GP\_3500ULM\_1214



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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