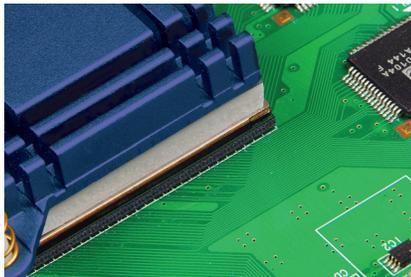


Gap Pad® VO Ultimate

Ultra Conformability, Robust, Improved Thermal Conductivity, Gap Filling Material

Features and Benefits

- Thermal conductivity: 1.3 W/m-K
- Ultra conformability
- Gel-like modulus
- Excellent rebound
- Decreased strain
- Remarkable handling
- Electrically isolating

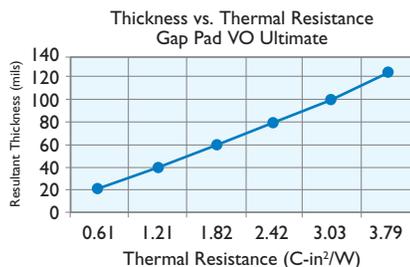


Gap Pad® VO Ultimate is a robust, highly compliant product that is ideal for both small and large gap designs. The fiberglass carrier on one side of the material allows ease of rework, excellent handling characteristics and puncture resistance. Additionally the fiberglass carrier has a slight inherent tack, minimizing any shifting during assembly.

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

The construction of Gap Pad® VO Ultimate; one side has high inherent tack, while the other side has minimal tack. This combination is useful for manual and automated processes.

Note: Resultant thickness is defined as the final gap thickness of the application.



TYPICAL PROPERTIES OF GAP PAD VO ULTIMATE					
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD		
Color	Gray/Black	Gray/Black	Visual		
Reinforcement Carrier	Fiberglass	Fiberglass	—		
Thickness (inch) / (mm)	0.020 to 0.125	0.508 to 3.175	ASTM D374		
Inherent Surface Tack (1 side)	I	I	—		
Density (Bulk Rubber) (g/cc)	1.8	1.8	ASTM D792		
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269		
Hardness (Bulk Rubber) (Shore 00) (1)	30	30	ASTM D2240		
Young's Modulus (psi) / (kPa) (2)	13	90	ASTM D575		
Continuous Use Temp (°F) / (°C)	-76 to 392	-60 to 200	—		
ELECTRICAL					
Dielectric Breakdown Voltage (Vac)	6000	6000	ASTM D149		
Dielectric Constant (1000 Hz)	5.0	5.0	ASTM D150		
Volume Resistivity (Ohm-meter)	10 ⁹	10 ⁹	ASTM D257		
Flame Rating	V-O	V-O	UL 94		
THERMAL					
Thermal Conductivity (W/m-K)	1.3	1.3	ASTM D5470		
THERMAL PERFORMANCE vs. STRAIN					
		Deflection (% strain)	10	20	30
	Thermal Impedance (°C-in ² /W) 0.040" (3)		1.60	1.55	1.46

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. 3) 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.

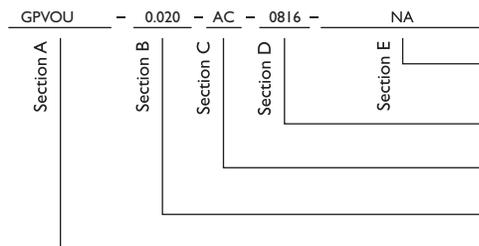
Typical Applications:

- Various IC packages
- Thermally enhanced BGA packages
- Between any heat-generating semiconductor and a heat sink
- Computers and peripherals
- Telecommunications
- Power conversion
- Automotive
- LED lighting packages

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

AC = Adhesive on Sil-Pad® side, natural tack on one side 01 = No pressure sensitive adhesive, natural tack on one side

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

GPVOU = Gap Pad VO Ultimate Material

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



www.bergquistcompany.com

The Bergquist Company - North American Headquarters
18930 West 78th Street
Chanhassen, MN 55317
Phone: 800-347-4572
Fax: 952-835-0430

The Bergquist Company - European Headquarters
Netherlands
Phone: 31-35-5380684
Fax: 31-35-5380295

The Bergquist Company - Asia Headquarters
Hong Kong
Phone: 852-2690-9296
Fax: 852-2690-2344

All statements, technical information and recommendations herein are based on tests we believe to be reliable, and THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MARKETABILITY AND FITNESS FOR PURPOSE. Sellers' and manufacturers' only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and the user assumes all risks and liability whatsoever in connection therewith. NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, INCLUDING LOSS OF PROFITS OR REVENUE ARISING OUT OF THE USE OR THE INABILITY TO USE A PRODUCT. No statement, purchase order or recommendations by seller or purchaser not contained herein shall have any force or effect unless in an agreement signed by the officers of the seller and manufacturer.

PDS_GP_VOUltimate_0711

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Bergquist Company:](#)

[GPVOU-0.020-01-0816](#) [GPVOU-0.040-01-0816](#) [GPVOU-0.060-01-0816](#) [GPVOU-0.080-01-0816](#) [GPVOU-0.100-01-0816](#) [GPVOU-0.125-01-0816](#)