

Conformable, Thermally Conductive Material for Filling Air Gaps

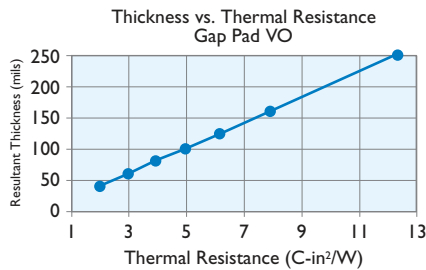
## Features and Benefits

- Thermal conductivity: 0.8 W/m-K
- Enhanced puncture, shear and tear resistance
- Conformable gap filling material
- Electrically isolating



Gap Pad VO is a cost-effective, thermally conductive interface material. The material is a filled, thermally conductive polymer supplied on a rubber-coated fiberglass carrier allowing for easy material handling. The conformable nature of Gap Pad VO allows the pad to fill in air gaps between PC boards and heat sinks or a metal chassis.

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



TYPICAL PROPERTIES OF GAP PAD VO			
PROPERTY	IMPERIAL VALUE	METRIC VALUE	TEST METHOD
Color	Gold/Pink	Gold/Pink	Visual
Reinforcement Carrier	Sil-Pad	Sil-Pad	—
Thickness (inch) / (mm)	0.020 to 0.250	0.508 to 6.350	ASTM D374
Inherent Surface Tack (1 sided)	I	I	—
Density (Bulk Rubber) (g/cc)	1.6	1.6	ASTM D792
Heat Capacity (J/g-K)	1.0	1.0	ASTM E1269
Hardness (Bulk Rubber) (Shore 00) (1)	40	40	ASTM D2240
Young's Modulus (psi) / (kPa) (2)	100	689	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)	5.5	5.5	ASTM D150
Volume Resistivity (Ohm-meter)	10 <sup>11</sup>	10 <sup>11</sup>	ASTM D257
Flame Rating	V-O	V-O	U.L. 94
THERMAL			
Thermal Conductivity (W/m-K)	0.8	0.8	ASTM D5470
THERMAL PERFORMANCE vs. STRAIN			
	Deflection (% strain)		
	10	20	30
Thermal Impedance (°C-in <sup>2</sup> /W) 0.040" (3)	2.47	2.37	2.24

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<sup>2</sup>. 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.

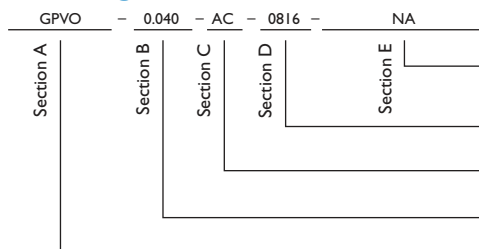
## Typical Applications Include:

- Telecommunications
- Computer and peripherals
- Power conversion
- Between heat-generating semiconductors and a heat sink
- Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader
- Between heat-generating magnetic components and a heat sink

## 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 thicknesses available: 0.020", 0.040", 0.060", 0.080", 0.100", 0.125", 0.160", 0.200", 0.250"

GPVO = Gap Pad VO Material

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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