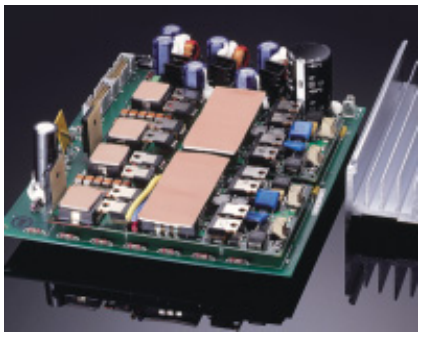
# Gap Pad VO Soft®

Highly Conformable, Thermally Conductive Material for Filling Air Gaps

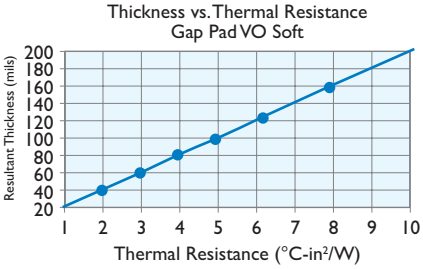
## Features and Benefits

- Thermal conductivity: 0.8 W/m-K
- Conformable, low hardness
- Enhanced puncture, shear and tear resistance
- Electrically isolating



Gap Pad VO Soft is recommended for applications that require a minimum amount of pressure on components. Gap Pad VO Soft is a highly conformable, low-modulus, filled-silicone polymer on a rubber-coated fiberglass carrier. The material can be used as an interface where one side is in contact with a leaded device.

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




**TYPICAL PROPERTIES OF GAP PAD VO SOFT**

| PROPERTY | IMPERIAL VALUE | METRIC VALUE | TEST METHOD |
|---|---|---|---|
| Color | Mauve/Pink | Mauve/Pink | Visual |
| Reinforcement Carrier | Sil-Pad | Sil-Pad | — |
| Thickness (inch) / (mm) | 0.020 to 0.200 | 0.508 to 5.080 | ASTM D374 |
| Inherent Surface Tack (1- or 2-sided) | 1 | 1 | — |
| Density (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) | 25 | 25 | ASTM D2240 |
| Young's Modulus (psi) / (kPa) (2) | 40 | 275 | 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) | $10^{11}$ | $10^{11}$ | ASTM D257 |
| Flame Rating | V-O | V-O | U.L. 94 |
| **THERMAL** | | | |
| Thermal Conductivity (W/m-K) | 0.8 | 0.8 | ASTM D5470 |

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 inch². For more information on Gap Pad modulus, refer to Bergquist Application Note #116.

## Typical Applications Include:

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

## Configurations Available:

- Sheet form and die-cut parts

## Building a Part Number

GPVOS – 0.060 – AC – 00 – ACME10256 Rev. a

Section A: GPVOS = Gap Pad VO Soft Material

Section B: Standard thicknesses available: 0.020", 0.040", 0.060", 0.080", 0.100", 0.125", 0.160", 0.200"

Section C: AC = Pressure sensitive adhesive, one side; 00 = No pressure sensitive adhesive

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

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

## Standard Options

◀◀ *example*

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

Gap Pad®: U.S. Patent 5,679,457 and others.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