

BERGQUIST® GAP PAD TGP 40000SF

November 2024

PRODUCT DESCRIPTION

BERGQUIST® GAP PAD TGP 40000SF, a 40 W/m-K, is silicone free Gap Pad with oriented filler technology achieving ultra-high thermal conductivity.

Technology	Silicone free
Appearance	Black
Application	Thermal management, TIM (Thermal Interface Material)
Operating temperature range	-40°C - 150°C

Features and benefits

- Thermal conductivity: 40 W/m-K
- Silicone free – low bleed, low outgassing
- Not electrically insulating
- Ease of handling, assembly, disassembly

BERGQUIST® GAP PAD TGP 40000SF is a gap filling material rated at a thermal conductivity of 40 W/m-K. It is specially formulated for high performance applications requiring silicone free solutions. The material offers exceptional thermal performance at typical pressures due to the unique filler package. Available with one side PSA for enhanced handling and fixturing.

Typical applications

- 5G telecom and datacom
- DSPs in optical transceivers
- GPUs, CPUs in high performance computing
- Immersion cooling for AI accelerators
- Vehicle control units and sensors for ADAS
- Aerospace, defense electronics
- LEDs and lasers

TYPICAL PROPERTIES

Physical properties

Hardness, Shore 00, ASTM D2240	85
Density, ASTM D792, g/cc	1.7
Shelf life, days	365
Stress @ 10% strain*, ASTM D575, psi	56

Note: One side surface tack optional, material not naturally tacky

*Measured on 40mil thick pads

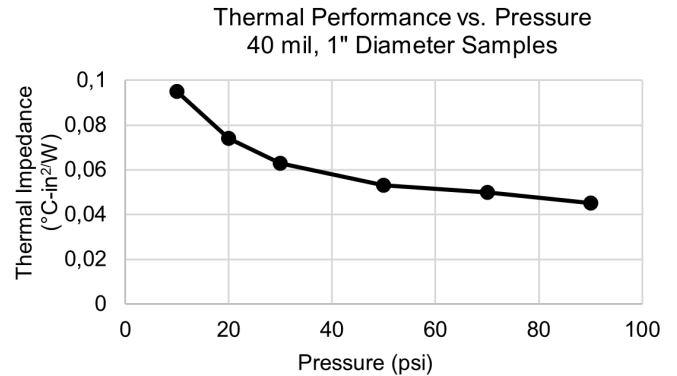
Thermal properties

Thermal conductivity, ASTM D5470, W/mK	40*
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Note: Optimal thermal performance at 10% strain

*Measured 0.5mm to 1.5mm pads at 50psi

Thermal performance vs. deflection



GENERAL INFORMATION

For safe handling information on this product, consult the Safety Data Sheet (SDS).

CONFIGURATIONS AVAILABLE

BERGQUIST® GAP PAD TGP 40000SF is available in the following configurations, custom part sizes available upon request:

Sheet size	6" x 6" **
Standard thicknesses	20, 40, 60, 80, 100, 125 mil

** 4"x6" size for 20mils thickness

Custom thicknesses available upon request

Storage:

Store product in an unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 5 to 28°C, 50% RH (±10) for a 365 days shelf life in sealed containers with moisture barrier packaging.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on the specifications of this product.

Approval and certificate

Please contact Henkel representative for related approval or certificate of this product

Data ranges

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Conversions

(°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil

mm / 25.4 = inches

µm / 25.4 = mil

N x 0.225 = lb

N/mm x 5.71 = lb/in

N/mm² x 145 = psi

MPa x 145 = psi

N·m x 8.851 = lb·in

N·m x 0.738 = lb·ft

N·mm x 0.142 = oz·in

mPa·s = cP

Disclaimer

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