GOF1000 Thermal Gasket

Thermally Conductive Gasket w/ Polyurethane Foam



GOF1000 THERMAL GASKET

Laird's Graphite-over-Foam (GOF), GOF1000 thermal gasket, provides thermal transfer performance in the form of a traditional wrapped compressible foam gasket. GOF1000 combines the thermal transfer performance of the Tgon™ 9000 synthetic graphite outside wrap and the repeatable compression and rebound of a foam core. GOF1000 utilizes a polyurethane foam.

FEATURES AND BENEFITS

- Efficient thermal transfer over large gaps
- High Deflection
- Repeatable compression and rebound cycles
- Lightweight
- Low force thermal interface
- Abrasion resistant exterior
- Ease of manufacturing for high volume
- No bleed from silicone oil or other materials
- Use multiple 5mm width columns to lower overall thermal resistance

VALUE

- Provides compressible thermal interface for sliding connections. Ideal for insertion applications.
- Ensures thermal interface contact in high vertical movement locations that would separate a traditional thermal putty, gel, or grease
- Offers lower force than traditional thermal gap pads for pressure sensitive applications
- Ideal thermal performance for large gap sizes
- Improved reliability performance of electronics
- RoHS and REACH compliant

PRODUCT PROPERTIES	GOF1000 TYPICAL VALUES
Color	Black
Operating Temperature	-40°C to 80°C
Standard Nominal Thicknesses (mm)	1.0, 1.2, 1.8, 2.6, 3.4, 5.0, 6.6, 9.8, 13.0
Thickness Tolerance	+/-0.3 mm (1.1 – 2.6 mm THK.) +/-0.5 mm (3.5 – 6.6 mm THK.) +/-0.7 mm (9.7 mm THK.) +/-1.0 mm (13.0 mm THK.)
Width Tolerance	+/-0.5mm
Available Width Range	3 mm to 25 mm
Available Length Range	5 mm to 300 mm
Compression Set	<35% @ 80°C @ 7 days @ 1-2mm <20% @ 80°C @ 7 days @ >2mm
Shelf Life	12 Months at 23°C/60% R.H.
Recommended Compression Range	Target compression 25% 15% to 35% for <2mm thick 15% to 50% for >2mm thick

Americas: +1.866.928.8181
Europe: +49.(0).8031.2460.0
Asia: +86.755.2714.1166

www.laird.com

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APPLICATION

Small cosmetic wrinkles in the part exterior are to be expected in the uncompressed state and do not affect thermal performance.

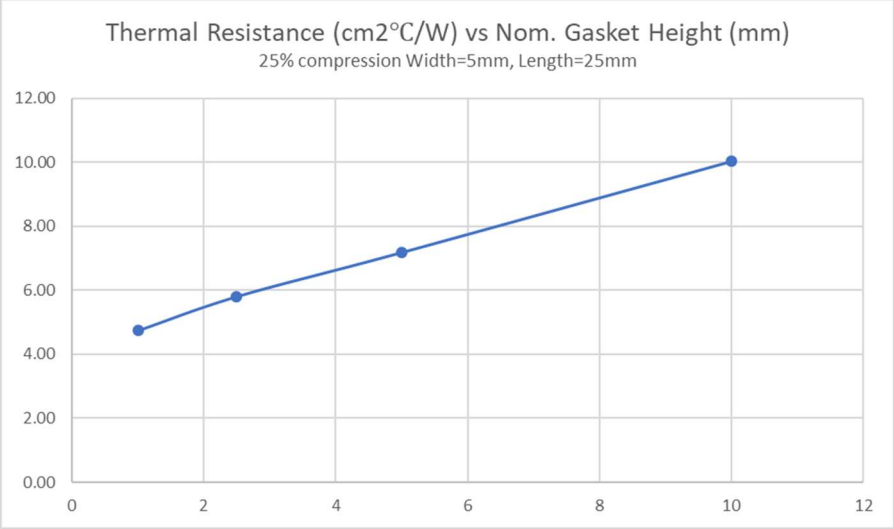
GOF1000 uses a 30um thick PSA as standard. This 30um is not included in the standard thickness listed in the chart above.

THERMAL CONDUCTIVITY & THERMAL RESISTANCE

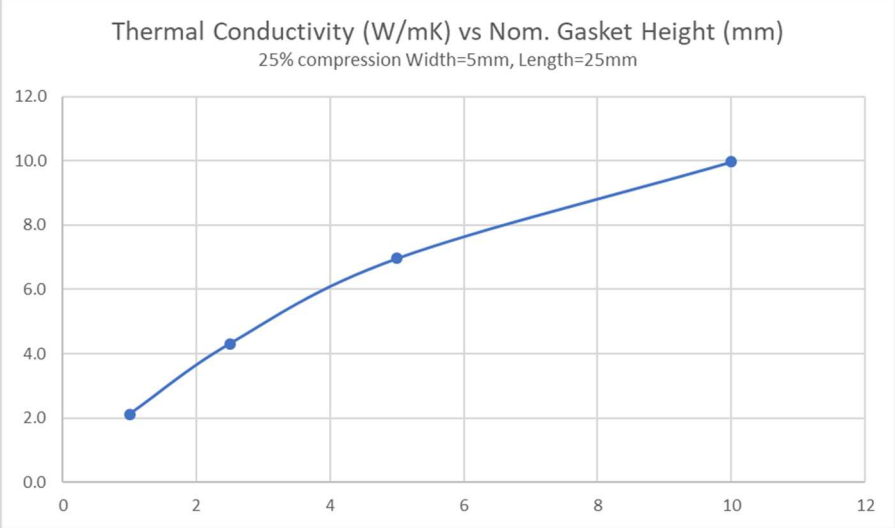
Graphite over foam is not a homogeneous material and therefore thermal conductivity is not a constant value across the different configurations and sizes. The values in the chart below are only for comparison's sake to traditional thermal gap pads. Thermal resistance is the more indicative value for design evaluation. Below values are based on representative 5.0mm wide by 25mm long samples. Final part Tr and Tc can be measured and reported in prototype phase to confirm exact value for the configuration.

A dual layer graphite version of GOF1000 is available for a 20% increase in thermal performance as seen in the charts below.

THERMAL RESISTANCE



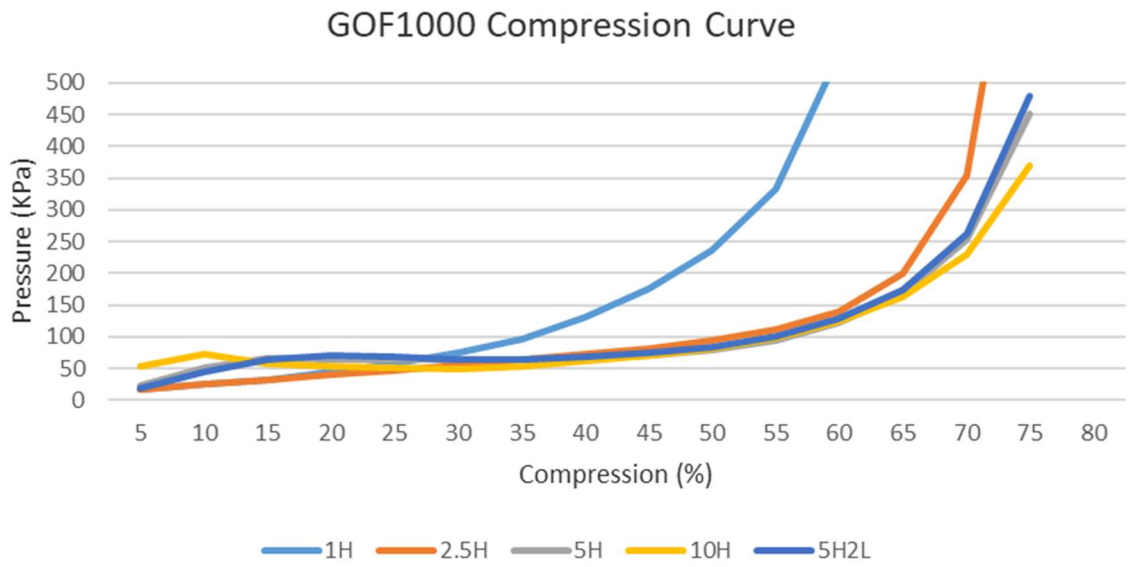
THERMAL CONDUCTIVITY



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GOF1000 PRESSURE VS DISPLACEMENT %



GOF1000 SAMPLE PART NUMBER

A sample of GOF1000, 2.5x5x25mm in shape, with the part number, LT19GOF1000SAMP.

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