

# GOF3000 Thermal & EMI Gasket

## Graphite-Over-Foam w/ Cu Wrap and Silicone Foam



### GOF3000 Thermal Gasket

Laird's Copper-over-Graphite-over-Foam (COGOF), GOF3000 thermal and EMI gasket, provides thermal transfer performance in the form of a traditional wrapped compressible foam gasket, and contains an outside copper wrap for electrical conductivity. GOF3000 combines the thermal transfer performance of the Tgon™ 9000 synthetic graphite outside wrap and the repeatable compression and rebound of the foam core. GOF3000 utilizes a silicone foam core for lower compression force and UL V0 flammability rating.

### FEATURES AND BENEFITS

- Electrical conductivity for EMI grounding
- High deflection
- Repeatable compression and rebound cycles
- Good thermal conductivity between interfaces
- Lightweight
- Low force thermal interface
- Abrasion resistant exterior
- Ease of manufacturing for high volume
- Meets environmental standards requirements
- UL V0 flammability rating

### VALUE

- Provides compressible thermal interface for sliding connections. Ideal for insertion applications.
- Ability to combine your EMI shielding and thermal management into one part
- Ensures thermal interface contact in high movement locations that would separate a traditional thermal putty, gel, or grease
- Offers lower force than traditional thermal interface pads for pressure sensitive applications
- Improved reliability performance of electronics
- Environmentally friendly solution meets including RoHS and REACH

TYPICAL PROPERTIES	DATA	TEST METHOD
Color	Copper	Visual
UL Flammability	UL V0 (pending)	UL
Standard Thicknesses (mm)	0.99, 1.19, 1.78, 2.57, 3.37, 4.95, 6.54, 9.72, 12.89	
Thickness and Width Tolerance	+/-0.3mm	
Compression Set	<2% @ 125°C @ 7 days	
Shelf Life	12 Months at 23°C/60% R.H.	

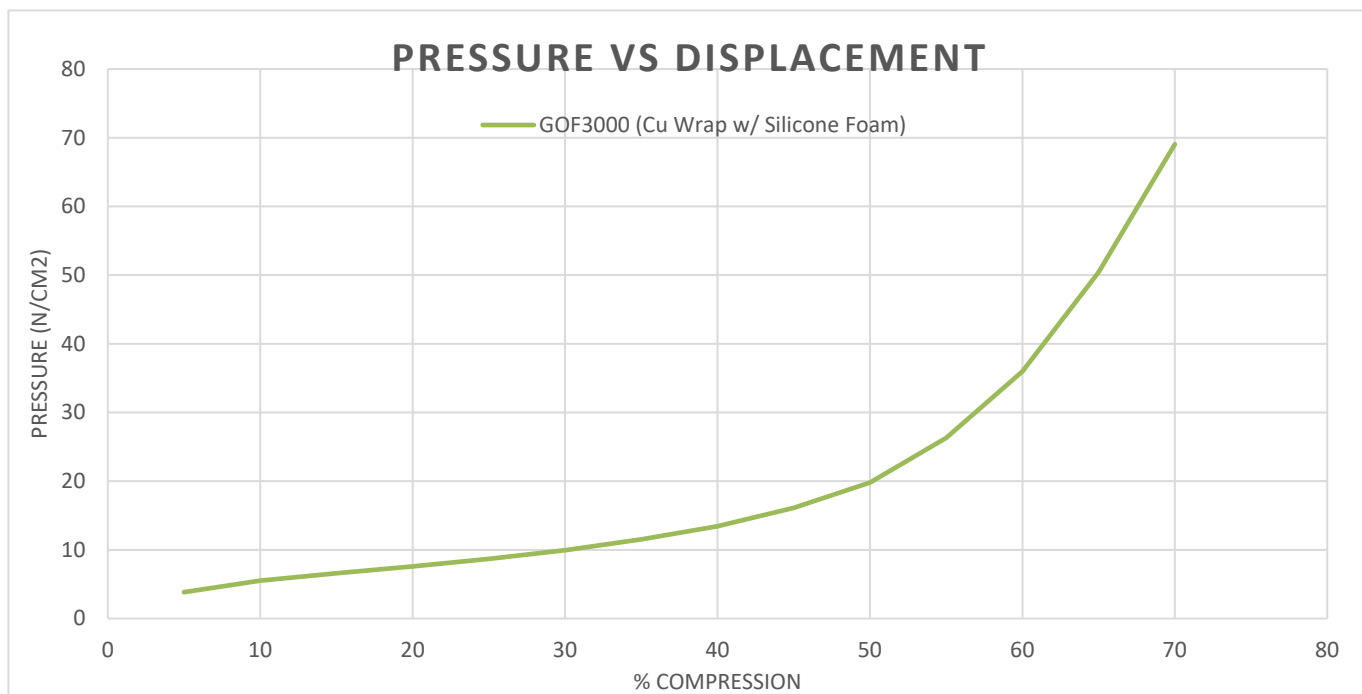
Americas: +1.866.928.8181

Europe: +49.(0).8031.2460.0

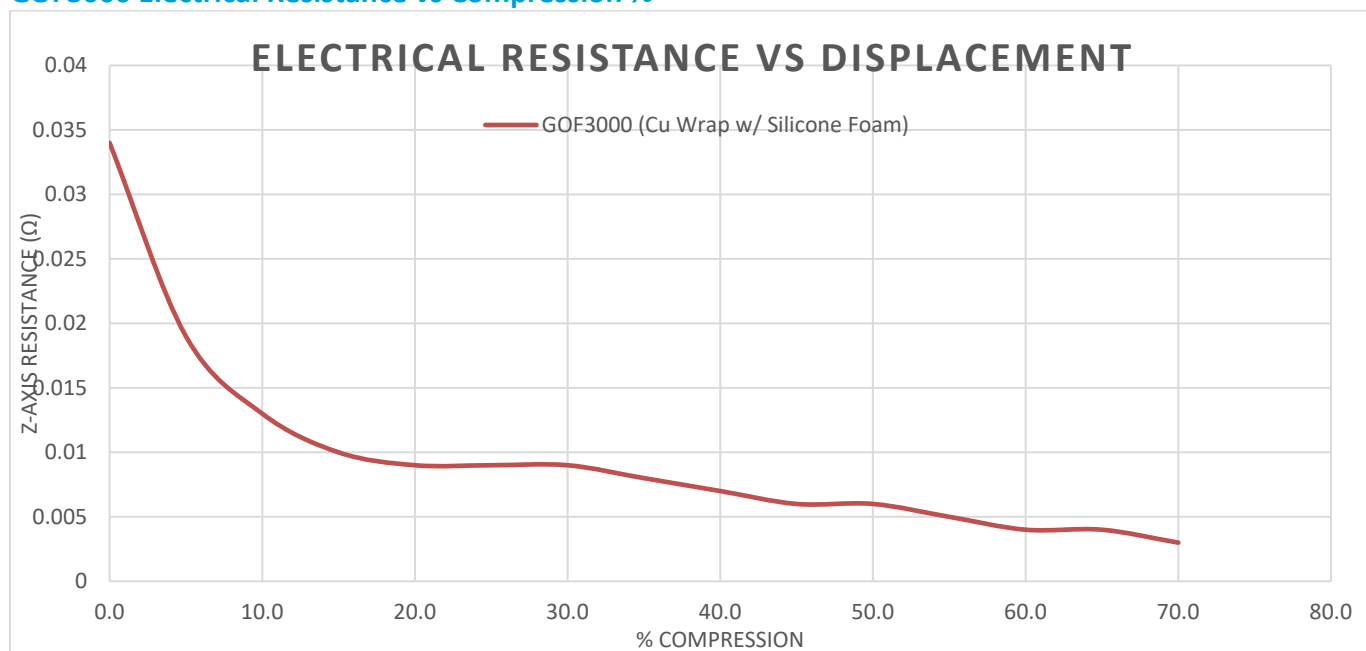
Asia: +86.755.2714.1166

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## GOF Pressure vs Compression %



## GOF3000 Electrical Resistance vs Compression %



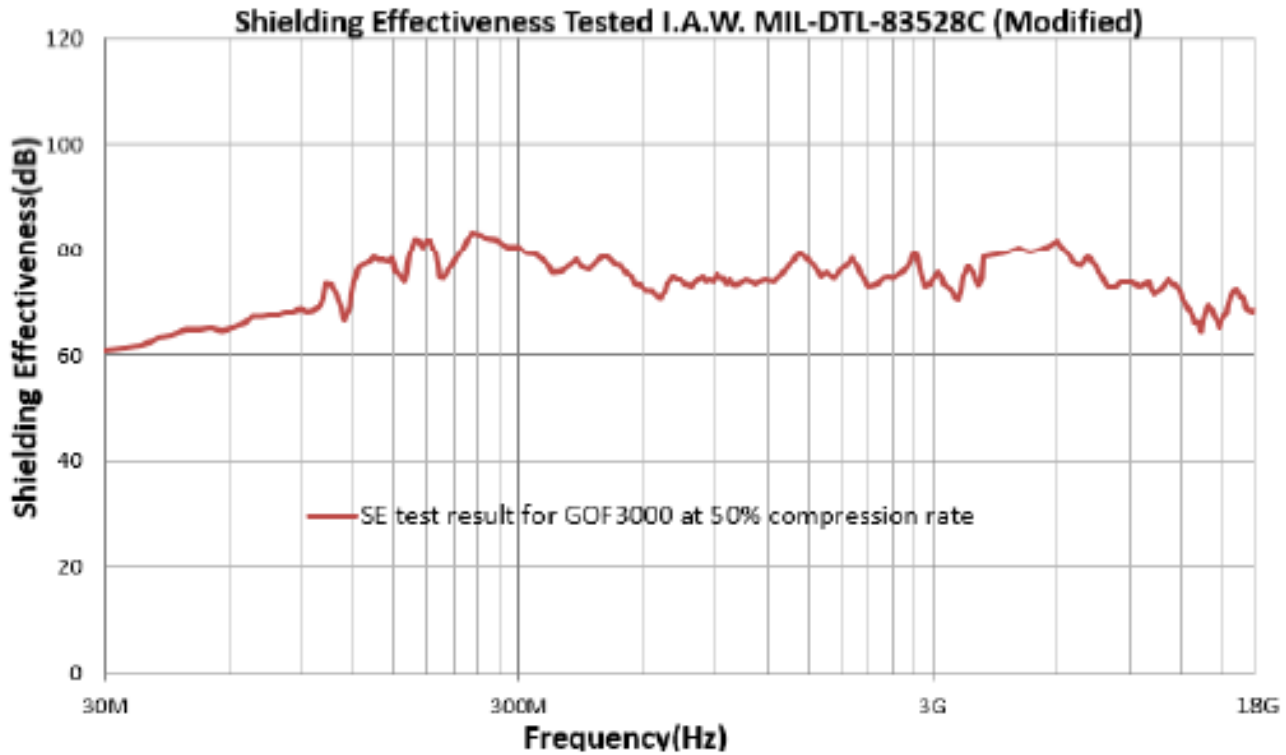
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## GOF3000 Shielding Effectiveness



**Figure 9: SE test results (30MHz to 18GHz).**

## PSA

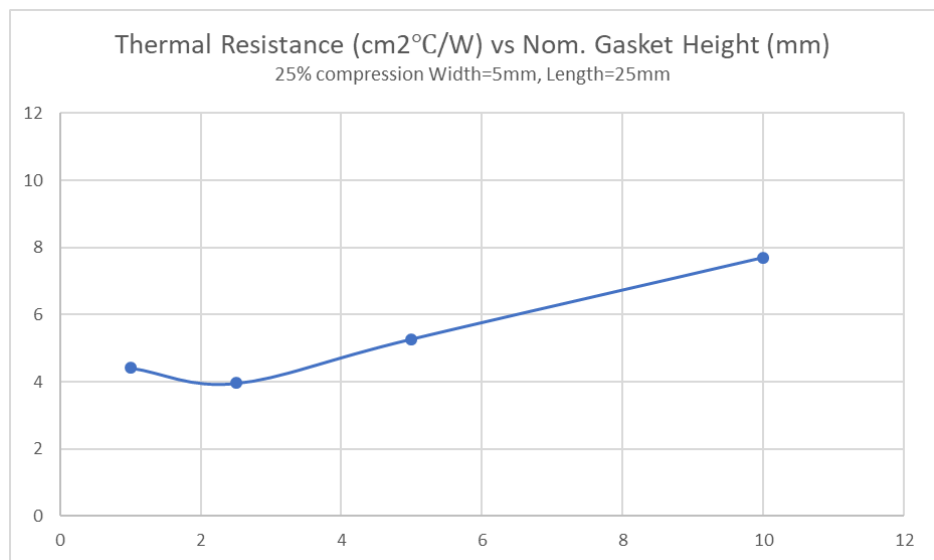
GOF3000 uses a 30um thick PSA as standard. This 30um is not included in the standard thickness listed in the chart above.

## Thermal Conductivity & Thermal Resistance

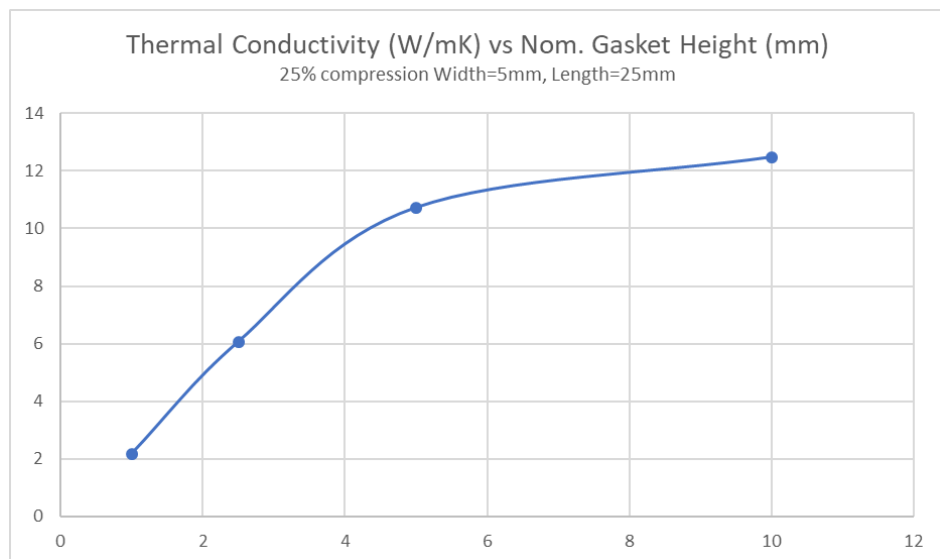
Graphite over foam is not a homogeneous material and therefore thermal conductivity is not a constant value across the different configurations and sizes. The values in the chart below are only for comparison's sake to traditional thermal gap pads. Thermal resistance is the more indicative value for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

A dual layer graphite version of GOF3000 is available for a 20% increase in thermal performance.

## Thermal Resistance



## Thermal Conductivity



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