



PRODUCT DESCRIPTION

Laird's Tflex™ HD90000 is the latest product in our High Deflection series. Tflex™ HD90000 combines 7.5 W/mK thermal conductivity with superior pressure versus deflection characteristics. The combination will allow minimal stress on components while also yielding low thermal resistance. As a result, less mechanical and thermal stresses will be experienced within your device.

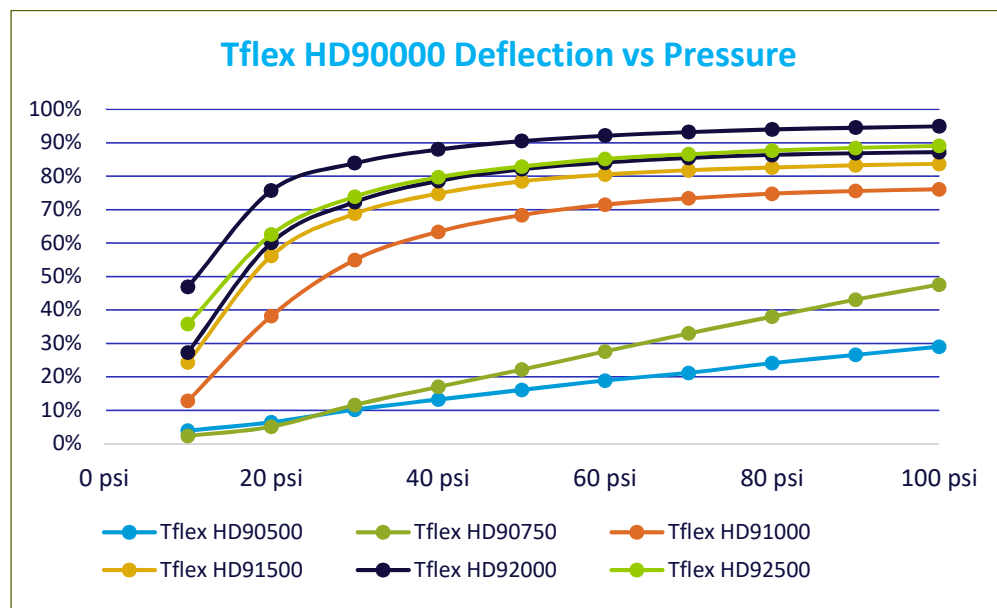
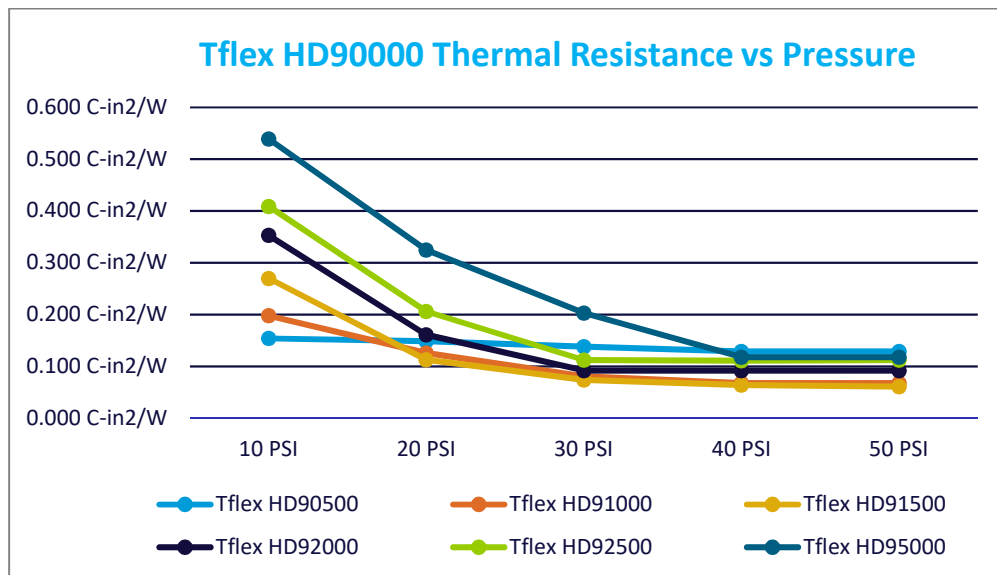
Tflex™ HD90000 is available in thickness from 0.020" (500 µm) to 0.200" (5000 µm). Laird can provide material to meet your production needs in any region through our local production facilities. Please contact your local Laird sales or field engineering contact for samples or questions.

FEATURES AND BENEFITS

- 7.5 W/mK thermal conductivity
- Low pressure versus deflection
- Excellent surface wetting for low contact resistance
- Minimizes board and component stress
- Low Outgassing
- Low D3-D20 (< 20ppm)
- Large tolerance applications
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

SPECIFICATIONS

TYPICAL PROPERTIES	VALUE	TEST METHOD
Construction & Composition	Ceramic filled silicone sheet	N/A
Color	Grey	Visual
Thickness Range	0.020" (500 µm) - 0.20" (5000 µm)	N/A
Thermal Conductivity (W/mK)	7.5	Hot Disk
Density (g/cc)	3.5	Helium Pycnometer
Hardness (Shore 00)	500 and 750 µm: 45 1000 µm and up: 32	ASTM D2240
Outgassing TML (weight %)	0.17	ASTM E595
Outgassing CVCM (weight %)	0.01	ASTM E595
Temperature Range	-50°C to 125°C	Laird Test Method
Rth at 40 mils, 10 psi, 50° C	0.198°C-in2/W	ASTM D5470
Dielectric Constant at 1 MHz	8.14	ASTM D150
UL Flammability Rating	V-0	UL 94
Volume Resistivity	8.73×10 ¹³ ohm-cm	ASTM D257



AVAILABILITY

STANDARD THICKNESSES

- 0.020" (500 μm) up to 0.200" (5000 μm) thick material available in 250 μm increments
- Available in standard sheet sizes of 18" x 18" (1000 μm and up only) and 9" x 9" or custom die cut parts.

PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. HD90000 indicates Tflex™ HD90000 product line with thickness in microns

EXAMPLES:

- Tflex™ HD91000= 1000 μm (0.040") thick Tflex™ HD90000 material
- Tflex™ HD95000= 5000 μm (0.200") thick Tflex™ HD90000 material

A17807-00 Tflex™ HD90000 DS 06062019



Tflex™ HD90000 Series

Thermal Gap Filler

A17807-00 Tflex™ HD90000 DS 06062019

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Mouser Electronics

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Laird Performance Materials:

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