



## 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.

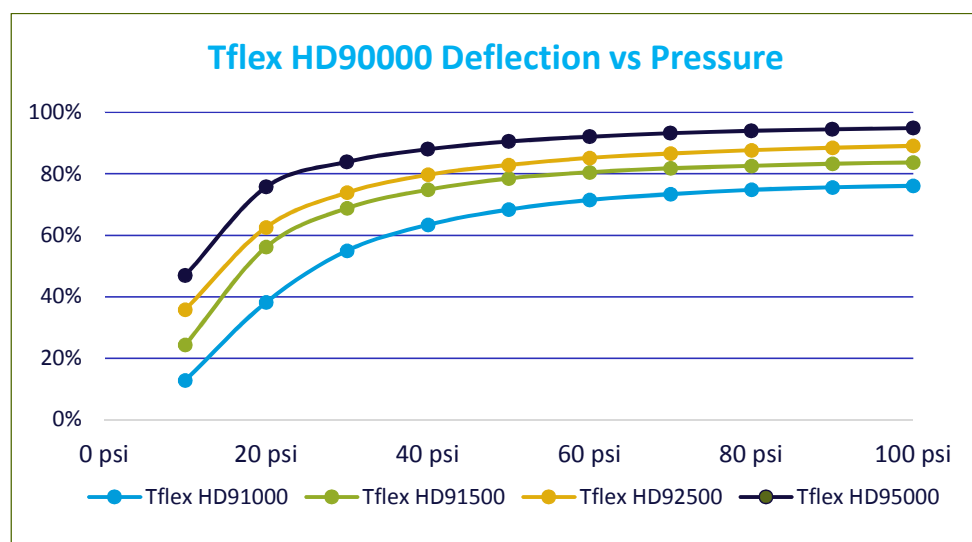
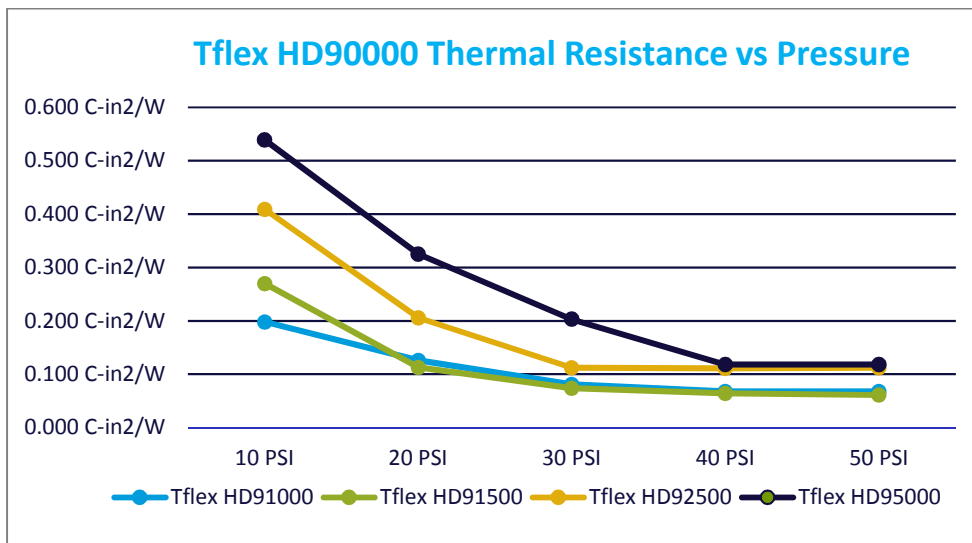
Tflex™ HD90000 is available in thickness from 0.040" (1000 µm) to 0.200" (5000 µm). Laird can provide material to meet your production needs in any region through our local production facilities. Please contact your local Laird sales or field engineering contact for samples or questions.

## 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
<b>Construction &amp; Composition</b>	Ceramic filled silicone sheet	N/A
<b>Color</b>	Grey	Visual
<b>Thickness Range</b>	0.040" (1000 µm) - 0.20" (5000 µm)	N/A
<b>Thermal Conductivity (W/mK)</b>	7.5	Hot Disk
<b>Density (g/cc)</b>	3.5	Helium Pycnometer
<b>Hardness (Shore 00)</b>	22	ASTM D2240
<b>Outgassing TML (weight %)</b>	0.17	ASTM E595
<b>Outgassing CVCM (weight %)</b>	0.01	ASTM E595
<b>Temperature Range</b>	-50°C to 125°C	Laird Test Method
<b>Rth at 40 mils, 10 psi, 50° C</b>	0.198°C-in <sup>2</sup> /W	ASTM D5470
<b>Dielectric Constant at 1 MHz</b>	8.14	ASTM D150
<b>UL Flammability Rating</b>	V-0 pending	UL 94
<b>Volume Resistivity</b>	8.73×10 <sup>13</sup> ohm-cm	ASTM D257



## AVAILABILITY

### STANDARD THICKNESSES

- 0.040" (1000 μm) up to 0.200" (5000 μm) thick material available in 250 μm increments
- Available in standard sheet sizes of 18" x 18" and 9" x 9" or custom die cut parts.

### OPTIONS

- DC1 – eliminate tack from one side

## 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

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