



## PRODUCT DESCRIPTION

Laird Tflex<sup>™</sup> HD300TG is a 2.7 W/mK gap filler material in Laird's high deflection line of products. Tflex HD300TG is an excellent choice when wide manufacturing tolerances occur as variable gaps can be filled with Tflex HD300TG while generating minimal board and component stress. Laird's unique manufacturing capabilities, and filler and resin knowledge result in this unique product designed with customer applications in mind.

Tflex HD300TG material exhibits excellent surface wetting characteristics and high deflection properties ensuring low contact resistances and providing an overall lower total thermal resistance.

The Tgard<sup>™</sup> liner is incorporated to offer guaranteed >6KV AC dielectric barrier, a cut-through resistant surface and a non-tacky surface for easy handling.

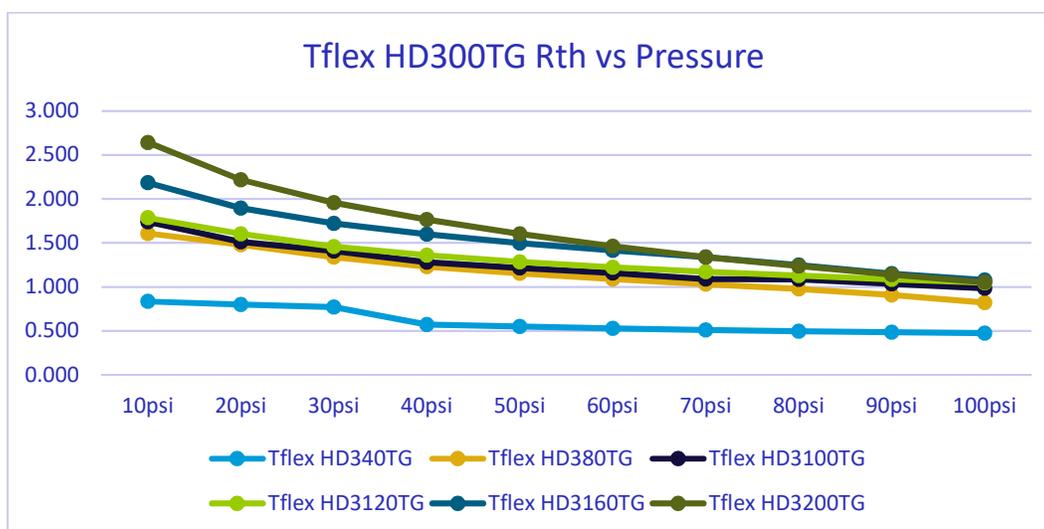
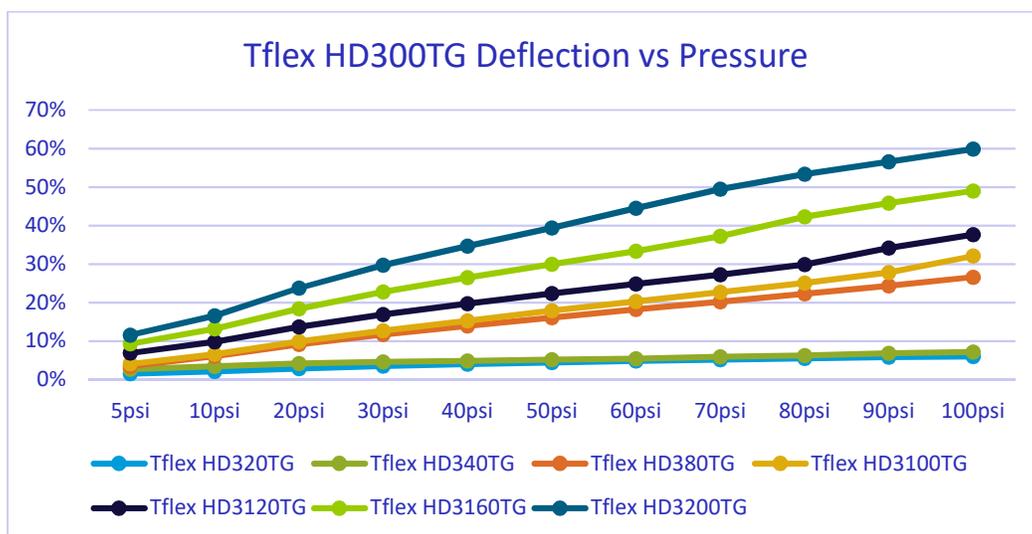
Another available option is to include the Tgard<sup>™</sup> liner in the middle, Tflex HD300MTG. This is an alternative format for 40mil and above thicknesses. Material still offers a guaranteed >6KV AC dielectric barrier with has cut-through resistant but maintains two-sided tackiness.

## FEATURES AND BENEFITS

- 2.7 W/m K thermal conductivity
- Low pressure versus deflection characteristics
- Excellent surface wetting for low contact resistance
- Minimizes board and component stress.
- Large tolerance applications
- RoHS and REACH compliant

## SPECIFICATIONS

TYPICAL PROPERTIES	VALUE	TEST METHOD
<b>Construction &amp; Composition</b>	Ceramic filled silicone sheet	N/A
<b>Color</b>	Tan	Visual
<b>Thickness Range</b>	0.50mm (0.020") 5.0mm (0.20")	N/A
<b>Thickness Tolerance</b>	+/- 10%	N/A
<b>Thermal Conductivity (W/mK)</b>	2.7	ASTM D5470
<b>Density (g/cc)</b>	3.1	Helium Pycnometer
<b>Hardness (Shore 00)</b>	38	ASTM D2240
<b>Outgassing TML (weight %)</b>	0.39	ASTM E595
<b>Outgassing CVCM (weight %)</b>	0.10	ASTM E595
<b>Temperature Range</b>	-40°C to 180°C	Laird Test Method
<b>Rth@ 40 mils, 10 psi</b>	1.05°C-in <sup>2</sup> /W	ASTM D5470 (Modified)
<b>Dielectric Constant @ 1 MHz</b>	6.62	ASTM D150
<b>UL Flammability Rating</b>	V-0	UL-94
<b>Volume Resistivity</b>	1.2x 10 <sup>14</sup>	ASTM D257



## AVAILABILITY

### STANDARD THICKNESSES

- 0.5mm (0.020") to 5.0mm (0.200") thick material available in 0.25mm (0.010") increments
- Available in standard sheet sizes of 18" x 18" and 9" x 9" or custom die cut parts

### OPTIONS

- TG – Tgard liner on top of HD300
- MTG – Tgard liner within HD300 material

## PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. HD3xxx indicates Tflex HD300 product line with thickness in mils (0.001")

### EXAMPLES:

- Tflex HD340 = 0.040" thick Tflex™ HD300 material
- Tflex HD360TG = 0.060" thick Tflex HD300 material with Tgard layer on top
- Tflex HD380MTG = 0.080" thick Tflex HD300 material with Tgard layer in the middle of Tflex HD300

Tflex HD300TG DS 071619