



PRODUCT DESCRIPTION

Laird Tflex™ HD300 is a 2.7 W/mK gap filler material in Laird's high deflection line of products. Tflex HD300 is an excellent choice when wide manufacturing tolerances occur as variable gaps can be filled with Tflex HD300 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 HD300 material exhibits excellent surface wetting characteristics and high deflection properties ensuring low contact resistances and providing an overall lower total thermal resistance.

A Tgard™ liner at one side option is provided to form into Tflex HD300TG, offer guaranteed >6KV AC dielectric barrier, is cut-through resistant and enables easy non-tacky handling at one side.

A Tgard™ liner in the middle option is provided to form into Tflex HD300MTG for 40mil and above thicknesses, offer guaranteed >6KV AC dielectric barrier, has cut-through resistant and two-sided tackiness.

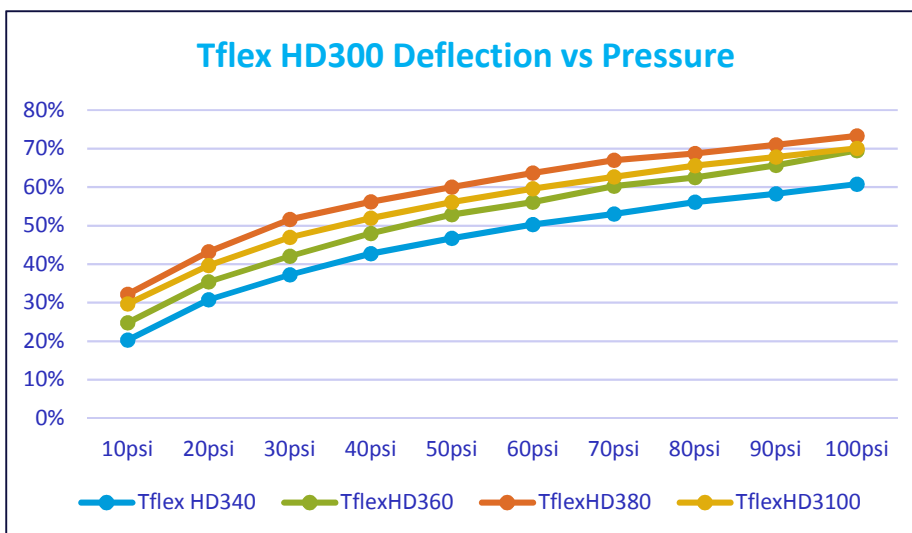
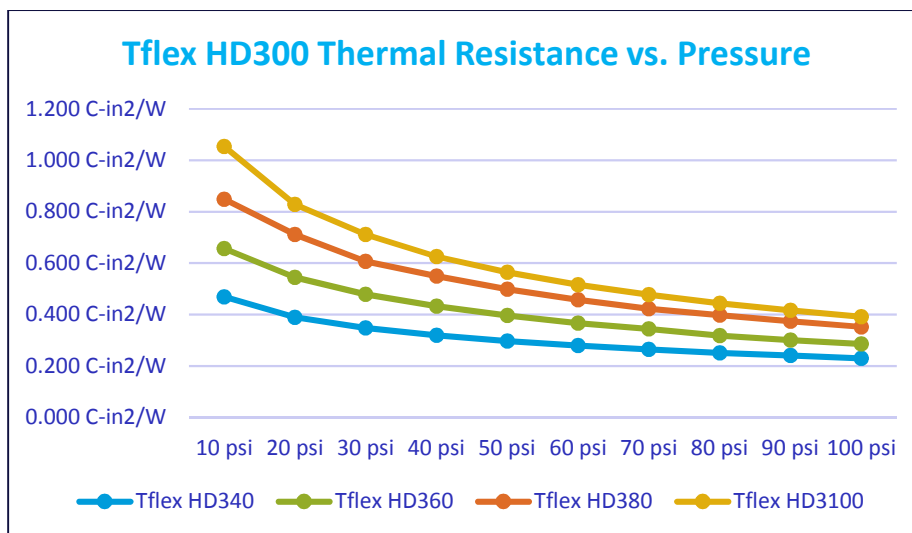
FEATURES AND BENEFITS

- 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
Construction & Composition	Ceramic filled silicone sheet	N/A
Color	Pink	Visual
Thickness Range	0.50mm (0.020") 5.0mm (0.20")	N/A
Thickness Tolerance	+/- 10%	N/A
Thermal Conductivity (W/mK)	2.7	ASTM D5470
Density (g/cc)	3.1	Helium Pycnometer
Hardness (Shore 00)	38	ASTM D2240
Outgassing TML (weight %)	0.39	ASTM E595
Outgassing CVCN (weight %)	0.10	ASTM E595
Temperature Range	-40°C to 200°C*	Laird Test Method
Rth@ 40 mils, 10 psi	0.573°C-in ² /W	ASTM D5470 (Modified)
Dielectric Constant @ 1 MHz	6.62	ASTM D150
UL Flammability Rating	V-0	UL-94
Volume Resistivity	1.2x 10 ¹⁴	ASTM D257

*Upper Temperature range for HD300TG, HD300MTG is 180°C.



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

- DC1 – eliminate tack from one side
- 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 HD3100DC1 = 0.10" thick Tflex™ HD300 material with DC1 option
- 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 HD300 DS 091318