



### PRODUCT DESCRIPTION

Laird Tflex<sup>™</sup> HD700 is our latest product in our High Deflection series. Tflex<sup>™</sup> HD700 combines 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.

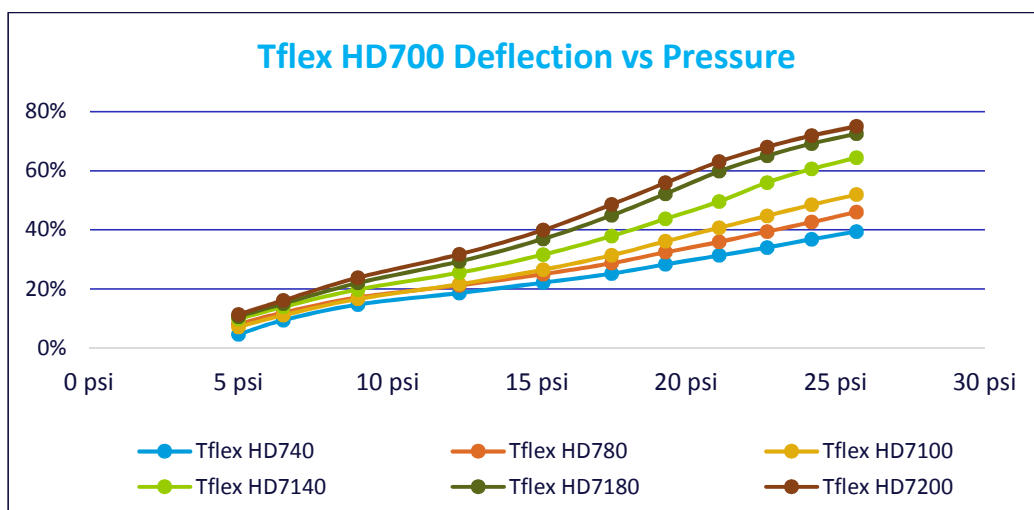
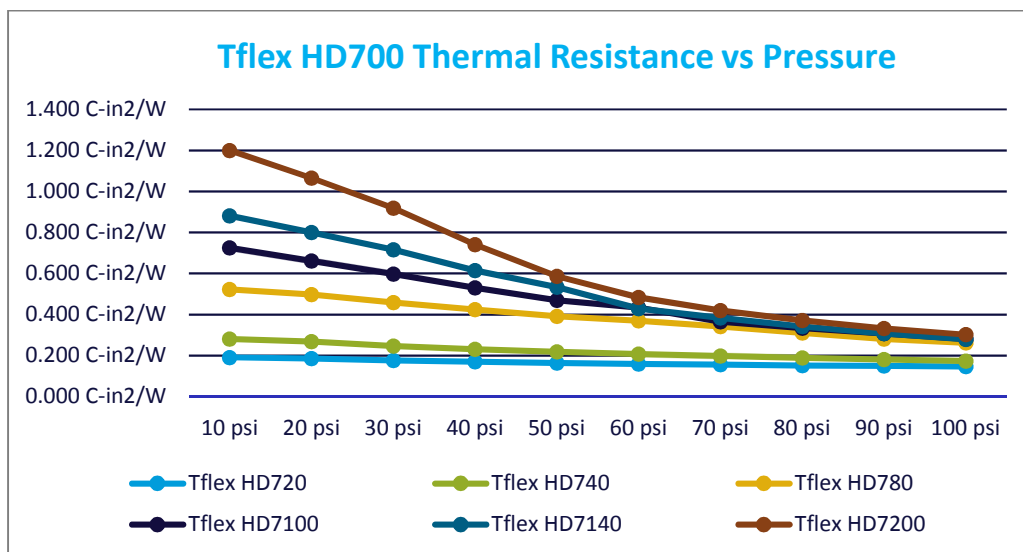
Tflex<sup>™</sup> HD700 is available in thickness from 0.5mm (0.020") to 5mm (0.200"). Laird can provide material to meet your production needs in any region through our local production facilities. Please contact your local Laird sales or field engineering contact for samples or questions.

### FEATURES AND BENEFITS

- 5.0 W/mK thermal conductivity
- Low pressure versus deflection
- Excellent surface wetting for low contact resistance
- Minimizes board and component stress
- 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>                          | Pink                          | Visual                |
| <b>Thickness Range</b>                | 0.50mm (0.020") 5.0mm (0.20") | N/A                   |
| <b>Thermal Conductivity (W/mK)</b>    | 5.0                           | ASTM D5470            |
| <b>Density (g/cc)</b>                 | 3.3                           | Helium Pycnometer     |
| <b>Hardness (Shore 00)</b>            | 66 (0.5-0.75mm)<br>55 (1-5mm) | ASTM D2240            |
| <b>Outgassing TML (weight %)</b>      | 0.23                          | ASTM E595             |
| <b>Outgassing CVCM (weight %)</b>     | 0.07                          | ASTM E595             |
| <b>Temperature Range</b>              | -50°C to 200°C                | Laird Test Method     |
| <b>Rth@ 40 mils, 10 psi</b>           | 0.287°C-in <sup>2</sup> /W    | ASTM D5470 (Modified) |
| <b>Dielectric Constant @ 1 MHz</b>    | 5.01                          | ASTM D150             |
| <b>UL Flammability Rating</b>         | V-0                           | UL 94                 |
| <b>Volume Resistivity</b>             | 1.4x 10 <sup>14</sup> ohm-cm  | 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

- DC1 – eliminate tack from one side

## PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. HD7xxx indicates Tflex HD700 product line with thickness in mils (0.001")

### EXAMPLES:

- Tflex™ HD740 = 0.040" thick Tflex™ HD700 material
- Tflex™ HD7100,DC1 = 0.10" thick Tflex™ HD700 material with DC1 option

A17758-00 Tflex HD700 DS 071017

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