

# Tflex<sup>™</sup> HD90000 Series Thermal Gap Filler



## **PRODUCT DESCRIPTION**

Laird's Tflex<sup>™</sup> HD90000 is the latest product in our High Deflection series. Tflex<sup>™</sup> 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<sup>M</sup> HD90000 is available in thickness from 0.020" (500  $\mu$ m) to 0.200" (5000  $\mu$ m). 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**

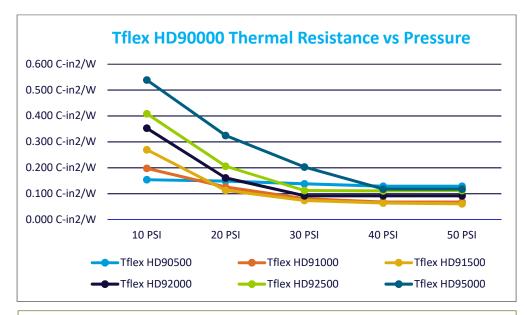
TYPICAL PROPERTIES	VALUE	TEST METHOD
<b>Construction &amp; Composition</b>	Ceramic filled silicone sheet	N/A
Color	Grey	Visual
Thickness Range	0.020" (500 μm) - 0.20" (5000 μm)	N/A
Thermal Conductivity (W/mK)	7.5	Hot Disk
Density (g/cc)	3.5	Helium Pycnometer
Hardness (Shore 00)	500 and 750 μm: 45	ASTM D2240
	1000 μm and up: 32	
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, 50º 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 <sup>13</sup> ohm-cm	ASTM D257

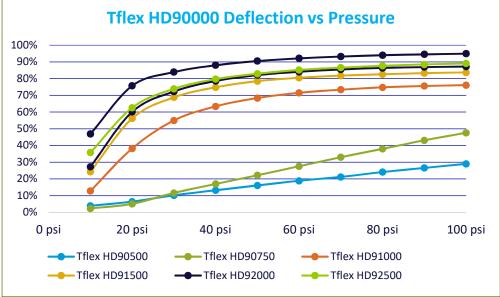
Americas: +1.866.928.8181 Europe: +49.(0).8031.2460.0 Asia: +86.755.2714.1166

www.lairdtech.com



# Tflex<sup>™</sup> HD90000 Series Thermal Gap Filler





### **AVAILABILITY**

#### STANDARD THICKNESSES

- 0.020" (500  $\mu$ m) up to 0.200" (5000  $\mu$ m) thick material available in 250  $\mu$ m 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<sup>™</sup> indicates Laird elastomeric thermal gap filler product line. HD90000 indicates Tflex<sup>™</sup> HD90000 product line with thickness in microns **EXAMPLES**:

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

A17807-00 Tflex™ HD90000 DS 06062019

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user. Laird Technologies makes no warranties as to the fitness, merchantability, suitability or non-infringement of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies tracts are sold pursuant to the Laird Technologies Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2013 Laird Technologies products are sold pursuant to the Laird Technologies tracts are sold end upon request. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.



# Tflex<sup>™</sup> HD90000 Series Thermal Gap Filler

#### A17807-00 Tflex™ HD90000 DS 06062019

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user. Laird Technologies materials as to the fitness, merchantability, suitability or non- infringement of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies, the Laird Technologies' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2013 Laird Technologies, the Laird Technologies, the taird Technologies, the taird Technologies, the taird Technologies, are trademarks or registered trademarks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third party intellectual property rights.