

Tflex[™] HD400 Series Thermal Gap Filler



Product Description

Laird Tflex HD400 is a 4.0 W/mK gap filling material in our high deflection line of products. Tflex HD400 is an excellent choice when wide manufacturing tolerances occur. These variable gaps can be filled with Tflex HD400 while generating minimal board and component stress. Laird's unique manufacturing capabilities, filler and resin knowledge result in this advanced product designed with customer applications in mind.

Tflex HD400 is provided in thickness from 0.5mm (.020") up to 5mm (0.200") in 0.25mm (.020") increments as standard. In addition, Laird can provide Tflex HD400 in multiple converted formats through approved converters and distribution networks.

FEATURES AND BENEFITS

- 4.0 W/mK thermal conductivity
- Low pressure versus deflection
- 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	Blue	Visual
Thickness Range	0.5 mm (0.020") - 5.0mm (0.20")	N/A
Thermal Conductivity (W/mK)	4.0	ASTM D5470
Density (g/cc)	3.0	Helium Pycnometer
Hardness (Shore 00)	44	ASTM D2240
Outgassing TML (weight %)	0.22	ASTM E595
Outgassing CVCM (weight %)	0.04	ASTM E595
Temperature Range	-40°C to 200°C	Laird Test Method
Rth@ 40 mils, 10 psi	0.36°C–in2/W	ASTM D5470 (Modified)
Dielectric Constant @ 1 MHz	10.7	ASTM D150
UL Flammability Rating	V-0	UL 94
Volume Resistivity	2.8 x 10 ¹⁴	ASTM D257

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



Tflex[™] HD400 Series Thermal Gap Filler





AVAILABILITY

STANDARD THICKNESSES

- 0.5 mm (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. HD4xxx indicates Tflex HD400 product line with thickness in mils (0.001") EXAMPLES:

- Tflex[™] HD440 = 0.040" thick Tflex[™] HD400 material
- Tflex[™] HD4100DC1 = 0.10" thick Tflex[™] HD400 material with DC1 option

A17434-00 Tflex HD400 DS 070717

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 are 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 products 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, Inc. all Rights Reserved. Laird, Laird Technologies, the Laird Technologies logo, and other marks 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 parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.