### Laird TECHNOLOGIES

### Innovative **Technology** for a **Connected** World

Laird

# **Tflex<sup>™</sup> 300 Series** Thermal Gap Filler

### UNIQUE SILICONE GEL OFFERS COMPLIANCY, THERMAL RESISTANCE

Tflex<sup>™</sup> 300, at pressures of 50psi, will deflect to over 50% the original thickness. This high rate of compliancy allows the material to "totally blanket" the component, enhancing thermal transfer. The material has a very low compression set enabling the pad to be reused many times.

Tflex<sup>™</sup> 300, in achieving its stellar compliancy, does not sacrifice thermal performance. With a thermal conductivity of 1.2 W/mK, low thermal resistances can be achieved at low pressures.

Tflex<sup>™</sup> 300-H is offered with a hard, metallized liner option for easy handling and improved rework. The metallized liner's lower coefficient of friction also allows for easy assembly of parts that must slide together, such as a card into a chassis.

Tflex<sup>™</sup> 300-TG is offered with a cut-through resistant Tgard<sup>™</sup> silicone liner. The TG liner offers a guaranteed dielectric barrier, and easier part handling for mass production.

### **FEATURES AND BENEFITS**

- Extreme compliancy allows material to "totally blanket" component(s)
- Thermal conductivity of 1.2 W/mK
- Available in thicknesses from 0.020" 0.200" (.5mm 5.0mm)
- Low compression set enables the pad to be reused many times

### **APPLICATIONS**

- Notebook and desktop computers
- Telecommunication hardware
- Flat panel displays
- Memory modules
- Power conversion equipment
- Set top box
- Lighting ballast
- Automotive electronics
- LED lighting
- Handheld electronics
- Optical disk drives
- Vibration dampening

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Americas: +1.888.246.9050 Europe: +49.(0).8031.2460.0 Asia: +86.755.2714.1166

CLV-customerservice@lairdtech.com www.lairdtech.com/thermal

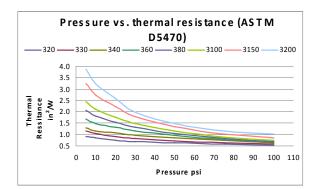


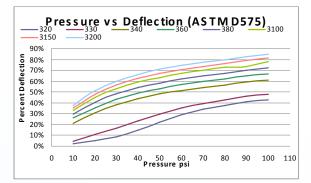
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## **Tflex<sup>™</sup> 300 Series** Thermal Gap Filler

### **TFLEX™ 300 TYPICAL PROPERTIES**

	TFLEX™ 300	TEST METHOD
Construction	Filled silicone elastomer	NA
Color	Light green	Visual
Thermal Conductivity	1.2 W/mK	ASTM D5470
Hardness (Shore 00)	27 (at 3 second delay)	ASTM D2240
Density	1.78 g/cc	Helium Pyncometer
Thickness Range	0.020"200" (0.5 - 5.0mm)*	
Thickness Tolerance	±10%	
UL Flammability Rating	94 V0	UL
Temperature Range	-40°C to 160°C	NA
Volume Resistivity	10 ^13 ohm-cm	ASTEM D257
Outgassing TML	0.56%	ASTM E595
Outgassing CVCM	0.10%	ASTM E595
Coefficient Thermal Expansion (CTE)	600 ppm/C	IPC-TM-650 2.4.24





### **STANDARD THICKNESSES**

0.020 to 0.200-inch (0.5 to 5.0mm)\*

0.020 to 0.200-inch thick material available in 0.010-inch (0.25mm) increments

0.250-inch (6.4 mm) also available with TG liner option only.

\*Inquire about availability of material and options above 0.200-inches

### **OPTIONS**

Tgard<sup>™</sup> "TG" dielectric barrier available to aid in handling and PET dielectric "H" liner available for applications where easy slide assembly is desirable

### **MATERIAL NAME AND THICKNESS**

Tflex<sup>™</sup> indicates elastomeric gap filler product line 3xxx indicates high recovery '3 series' 1.2 W/mK material -DC1 designates proprietary tack eliminated coating -TG indicates Tgard<sup>™</sup> liner option -H indicates hard PET liner option

### **EXAMPLES**

Tflex<sup>™</sup> 3120 = standard 0.120-inch thick Tflex<sup>™</sup> 300 material Tflex<sup>™</sup> 3120DC1 = 0.120-inch thick material with DC1 coating Tflex<sup>™</sup> 3120TG = 0.120-inch thick material with Tgard<sup>™</sup> liner Tflex<sup>™</sup> 3120H = 0.120-inch thick material with hard PET liner

#### THR-DS-TFLEX-300 1010

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