

## Product Description

Tflex™ UT20000 is a specially formulated ultra-thin gap filler thermal interface material designed for thin interfaces that offers excellent thermal performance and high compliancy. It is designed without embedded reinforcing fiberglass to minimize contact resistance, yet still allows easy material handling and durability during assembly.

Tflex™ UT20000 provides excellent interfacing and its ability to wet out mating surfaces allows for efficient transfer of heat away from components. It is an ideal choice for low-pressure applications and optimum solution in handheld devices with thin interface gap and limited space requirements.

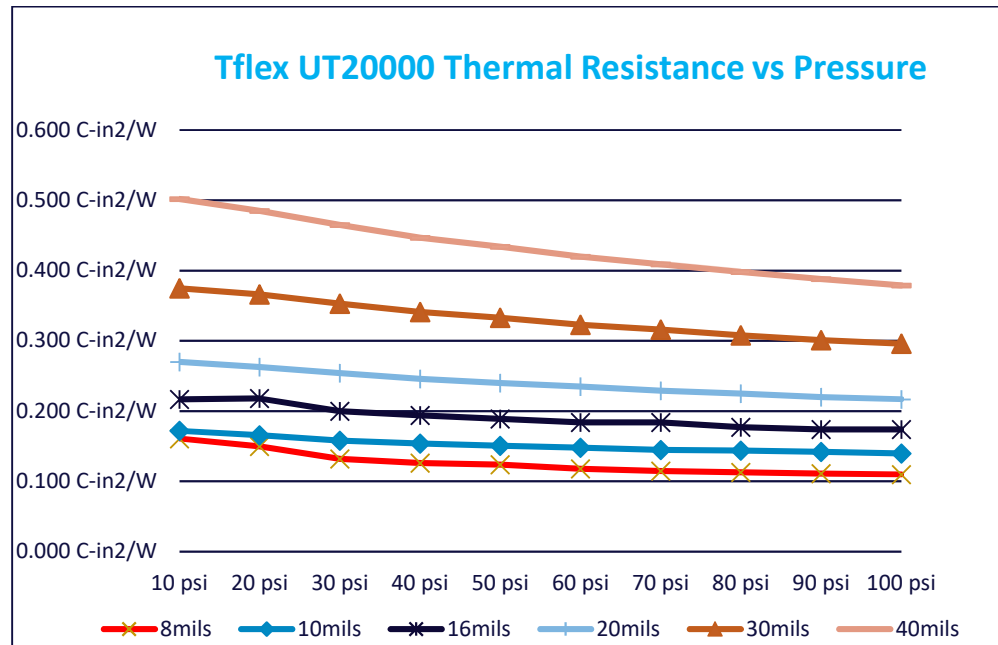
Tflex™ UT20000 is electrically non-conductive, stable from -50°C thru 200°C and offered in thicknesses that range from 0.008" (200 µm) up to 0.040" (1000 µm).

## FEATURES AND BENEFITS

- Thermal Conductivity of 3.0 W/mK
- No fiberglass carrier to minimize thermal resistance, yet still easy to handle
- Excellent surface wetting for low contact resistance
- Unique formulation minimizes thermal resistance at low mounting forces
- 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>	Grey	Visual
<b>Thickness Range</b>	200 µm (0.008")- 1000 µm (0.040")	N/A
<b>Thermal Conductivity (W/mK)</b>	3.0	Hot Disk
<b>Density (g/cc)</b>	3.2	Helium Pycnometer
<b>Hardness (Shore 00)</b>	83.3 (200-375) µm 56.4 (400-1000) µm	ASTM D2240
<b>Outgassing TML (weight %)</b>	0.34%	ASTM E595
<b>Outgassing CVCM (weight %)</b>	0.09%	ASTM E595
<b>Temperature Range</b>	-50°C to 200°C	Laird Test Method
<b>Rth@ 200 µm, 10 psi, 50° C</b>	0.25°C-in2/W	ASTM D5470
<b>Dielectric Constant @ 1MHz</b>	5.87	ASTM D150
<b>UL Flammability Rating</b>	V-0	UL 94
<b>Volume Resistivity</b>	2.2 x 10 <sup>15</sup> ohm-cm	ASTM D257



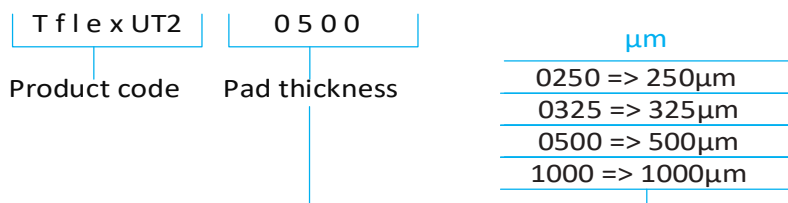
## AVAILABILITY

### STANDARD THICKNESSES

- 0.008" (200 μm) up to 0.020" (500 μm) thick material available in 25 μm increments
- Also available in 0.025" (625μm), 0.030" (750 μm), 0.035" (875μm), 0.040" (1000 μm)
- Available in standard sheet sizes of 18" x 18" and 9" x 9" or custom die cut parts. Custom die cut parts on a roll available for 200 μm (0.008") thru 375 μm (0.015")

### PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. UT20000 indicates Tflex UT20000 product line with thickness in microns



### EXAMPLES:

- Tflex™ UT20200= 200 μm (0.008") thick Tflex™ UT20000 material
- Tflex™ UT20500= 500 μm (0.020") thick Tflex™ UT20000 material

A17759-00 Tflex UT20000 DS 051419



# Tflex UT20000 Series Ultra-Thin Thermal Gap Filler

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