



### PRODUCT DESCRIPTION

Tflex™ SF10 is an innovative, high performing thermal material in Laird's gap filler portfolio. This silicone free material measures 10 W/mk and has excellent deflection properties which provides minimal pressure on components during deflection. Very little pressure is required to reach the lowest possible thermal resistance.

### FEATURES AND BENEFITS

- Silicone free formulation
- Low peak and residual pressure
- Excellent surface wetting for low contact resistance
- Exceptionally low thermal resistance
- No Fiberglass reinforcement
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

### TYPICAL PROPERTIES

PROPERTIES	TYPICAL VALUE	TEST METHOD
<b>Construction &amp; Composition</b>	Ceramic filled silicone free thermoplastic	N/A
<b>Color</b>	Grey	Visual
<b>Thickness Range</b>	0.5mm – 4mm (+/- 10%)	N/A
<b>Thermal Conductivity</b>	10 W/mk	Hot Disk
<b>Density</b>	3.7 g/cc	Helium Pycnometer
<b>Thermal Resistance (1.5mm) @ 30% deflection, 50 °C</b>	1.312 °C–cm <sup>2</sup> /W (0.203 Cin <sup>2</sup> /W)	ASTM D5470
<b>Temperature Range</b>	-40°C to 125°C	Laird Test Method
<b>Hardness Shore 00 (3 second)</b>	41 (1mm-4mm) 70 (0.5mm – 0.75mm)	ASTM D2240
<b>Hardness Shore 00 (30 second)</b>	8 (1mm – 4mm) 50 (0.5mm – 0.75mm)	ASTM D2240
<b>Outgassing (TML%)</b>	0.33	ASTM E595
<b>Outgassing (CVCM %)</b>	0.15	ASTM E595
<b>Dielectric Constant @1MHz</b>	9	ASTM D150
<b>Volume Resistivity (Ω cm)</b>	10 <sup>^14</sup>	ASTM D257
<b>UL Flammability Rating</b>	V-0 (1mm-4mm) V-0 (0.5mm-0.75mm, pending)	UL 94

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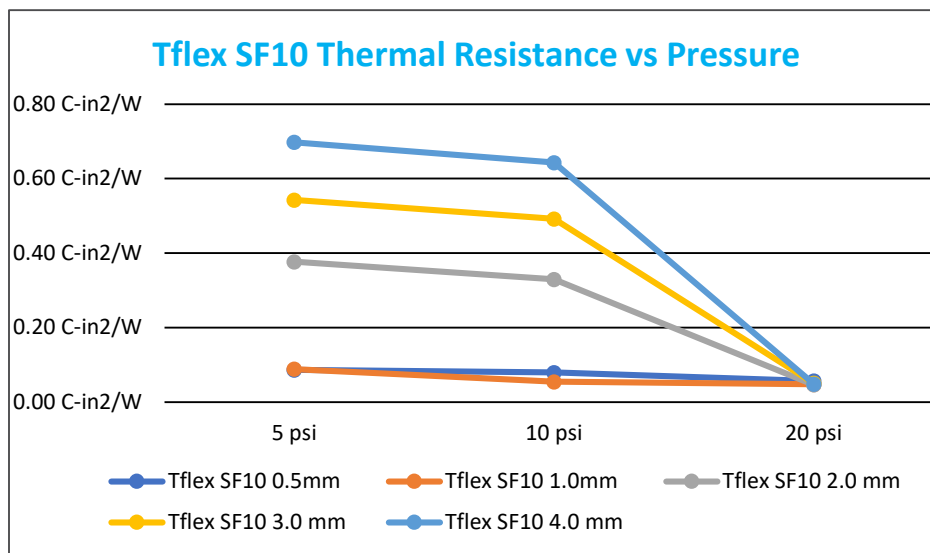
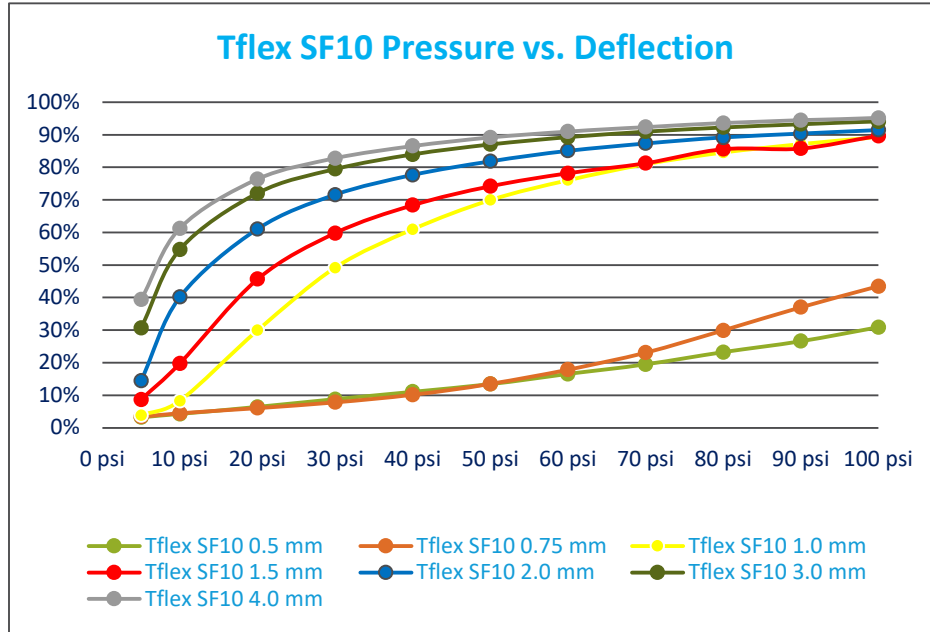
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[www.laird.com](http://www.laird.com)



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## AVAILABILITY

- 0.5 mm (0.020") to 4.0 mm (0.160") thick material available in 0.25mm (0.010") increments
- Available in standard sheet sizes of 9" x 9" or custom converted die cut parts
- DF material available to remove tack from one side
- A1 material to add adhesive to one side

## PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. SF10 is a silicone free 10 W/mk material. Thickness of the sheet in mm is listed after the material name.

### EXAMPLES:

- Tflex™ SF10,1.00 = 1.00mm thick Tflex SF10 material
- Tflex™ SF10DF,1.00 = 1.00mm thick Tflex SF10 material with only one side tacky

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