



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

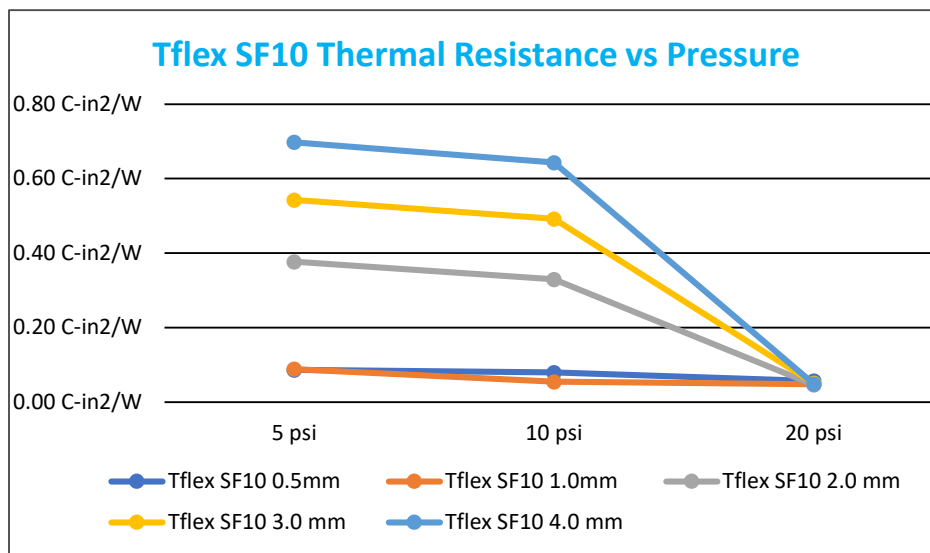
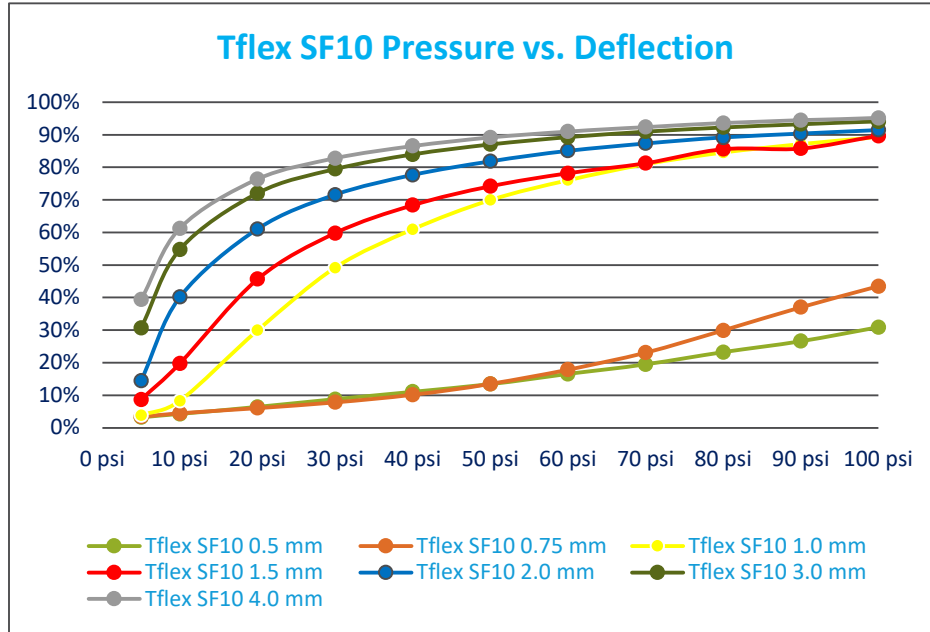
- Silicone free formulation
- Low peak and residual pressure
- Excellent surface wetting for low contact resistance
- Exceptionally low thermal resistance
- No Fiberglass reinforcement
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

TYPICAL PROPERTIES

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

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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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