Tflex™ XS400 Series
Thermal Gap Filler

COMPLIANT 2.0 W/mK THERMALLY CONDUCTIVE GAP FILLER

Tflex™ XS400 is a compliant elastomer gap filler designed to provide moderate thermal performance. This soft interface pad conforms well with minimal pressure, resulting in little or no stress on mating parts.

Tflex™ XS400 is naturally tacky, no adhesive coating is required. Due to its TG liner on the other side, Tflex™ XS400 is electrically insulating, stable from -40°C to 160°C and is certified to UL 94V0 flammability rating.

FEATURES AND BENEFITS
- Thermal Conductivity 2.0 W/mK
- Highly compliant
- Low thermal resistance even at low pressure
- Available in thicknesses from 0.020-inch (0.25mm) through 0.200-inch (5.0mm) in 0.010-inch increments
- Naturally tacky for easy assembly

APPLICATIONS
- Telecommunications
- Computer and peripherals
- Power conversion
- Between heat generating components and heatsinks

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Europe: +49.8031.2460.0
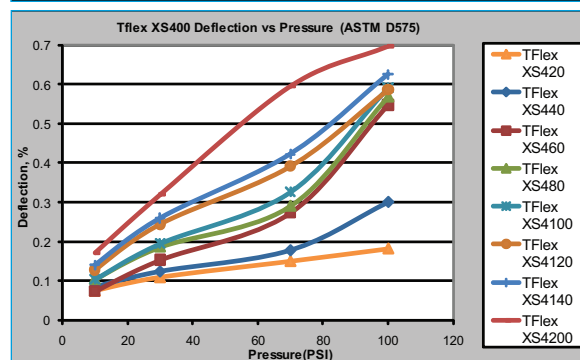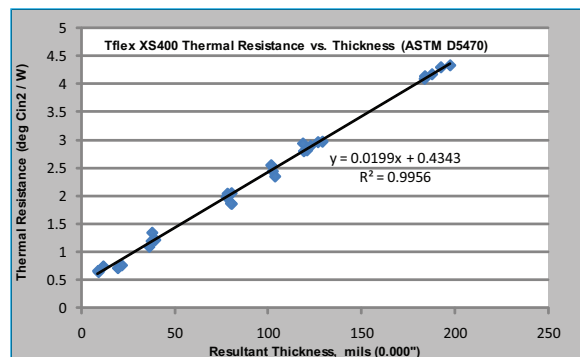Asia: +86.755.2714.1166

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

Laird TECHNOLOGIES®

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

Tflex™ XS400 TYPICAL PROPERTIES

	Tflex XS400™	TEST METHOD
Construction	Soft gap filler with TG liner	NA
Color	Dark grey / Red Liner	visual
Thermal Conductivity	2.0 W/mK	ASTM D5470
Hardness (Shore 00)	3 secs: 30 to 35 30 secs: 22 to 27	ASTM D2240
Specific Gravity	40 mils - 2.02; 120 mils -1.96	Helium Pyncometer
Thickness Range	0.020 - 0.200 in (0.5 - 5.1 mm)	
Thickness Tolerance	+/-10%	
UL Flammability Rating	V0 (pending)	UL 94
Temperature Range	-40°C to 160°C	NA
Outgassing TML	0.32%	ASTM E595
Outgassing CVCM	0.08%	ASTM E595
Coefficient Thermal Expansion (CTE)	pending	IPC-TM-650 2.4.24

Tflex XS400 Thermal Resistance vs. Thickness (ASTM D5470)

$y = 0.0199x + 0.4343$
$R^2 = 0.9956$

(Y-axis: Thermal Resistance (deg Cin2 / W); X-axis: Resultant Thickness, mils (0.000"))

Tflex XS400 Deflection vs Pressure (ASTM D575)

(Y-axis: Deflection, %; X-axis: Pressure(PSI))

Legend:
- TFlex XS420
- TFlex XS440
- TFlex XS460
- TFlex XS480
- TFlex XS4100
- TFlex XS4120
- TFlex XS4140
- TFlex XS4200

Notes: Resultant thickness is the final gap thickness of the application.

STANDARD THICKNESSES
Standard thickness is 0.020-inch (0.25 mm) through 0.200-inch (5.0 mm) and available in 0.010-inch (0.25 mm) increments.
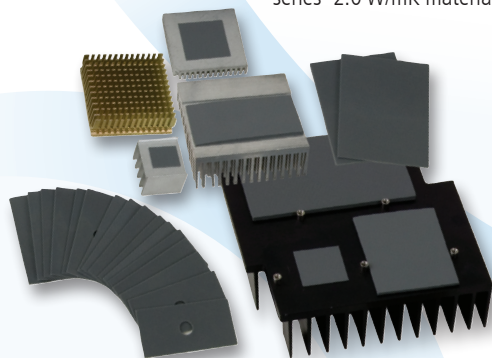
MATERIAL NAME AND THICKNESS
Tflex™ indicates Laird Technologies' brand thermally conductive elastomeric gap filler product. XS4xxx indicates 'XS400 series' 2.0 W/mK material, and xxx indicates thickness in mils (0.001-inches).

Examples:
Tflex™ XS4120 = 0.120-inch thick material
Tflex™ XS450 = 0.050-inch thick material

THR-DS-Tflex-XS400 0910

Mouser Electronics

Authorized Distributor

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