



global solutions :
local support™

T-flex™ 300 Series Thermal Gap Filler

Unique silicone gel offers compliancy, thermal resistance

T-flex™ 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.

T-flex™ 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.

T-flex™ 300 is offered with a hard, metallized liner option for easy handling and improved rework. This metallized liner offers better thermal transfer than other silicone based liners found on competitive products. 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.

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
- Hdisc drives, DVDs
- Flat Panel Displays
- Memory modules
- Power conversion equipment

For sales information:

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In the USA please telephone 1-800-246-9050

or visit: www.lairdtech.com





T-flex™ 300 Series Thermal Gap Filler

	T-flex™ 320	T-flex™ 340	T-flex™ 360	T-flex™ 380	T-flex™ 3100	Test Method
Construction & Composition	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	
Color	Light Green	Light Green	Light Green	Light Green	Light Green	Visual
Thickness	0.020" (0.51mm)	0.040" (1.02mm)	0.060" (1.52mm)	0.080" (2.03mm)	0.100" (2.54mm)	
Thickness Tolerance	± 0.002" (± 0.05mm)	± 0.004" (± 0.10mm)	± 0.006" (± 0.15mm)	± 0.008" (± 0.20mm)	± 0.010" (± 0.254mm)	
Density	1.78 g/cc	1.75 g/cc	1.75 g/cc	1.75 g/cc	1.75 g/cc	Helium Pycnometer
Hardness	45 Shore OO	20 Shore OO	20 Shore OO	20 Shore OO	20 Shore OO	ASTM D2240
Tensile Strength	N/A	15 psi	15 psi	15 psi	15 psi	ASTM D412
% Elongation	N/A	50	50	50	50	ASTM D412
% Deflection @10 psi	4%	21%	26%	30%	33%	
@50psi	23%	48%	53%	58%	63%	
@100 psi	43%	61%	68%	72%	76%	
Outgassing TML (Post Cured)	0.56%	0.56%	0.56%	0.56%	0.56%	ASTM E595
Outgassing CVM (Post Cured)	0.1%	0.1%	0.1%	0.1%	0.1%	ASTM E595
UL Flammability Rating	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	E180840
Temperature Range	-40°C to 160°C	-40°C to 160°C	-40°C to 160°C	-40°C to 160°C	-40°C to 160°C	
Thermal Conductivity	1.2 W/mK	1.2 W/mK	1.2 W/mK	1.2 W/mK	1.2 W/mK	ASTM D5470 (modified)
Thermal Resistance @ 10 psi	0.84°C - in ² /W	1.15°C - in ² /W	1.50°C - in ² /W	1.8°C - in ² /W	2.22°C - in ² /W	ASTM D5470 (modified)
@ 69KPa	5.42°C - cm ² /W	7.42°C - cm ² /W	9.68°C - cm ² /W	11.61°C - cm ² /W	14.32°C - cm ² /W	
Thermal Expansion 58°C - 103°C	754 ppm/°C	754 ppm/°C	754 ppm/°C	754 ppm/°C	754 ppm/°C	IPC-TM-650 2.4.24
Breakdown Voltage	6,000 VAC	>10,000 VAC	>10,000 VAC	>10,000 VAC	>10,000 VAC	ASTM D149
Volume Resistivity	6 x 10 ¹² ohm-cm	6 x 10 ¹² ohm-cm	6 x 10 ¹² ohm-cm	6 x 10 ¹² ohm-cm	6 x 10 ¹² ohm-cm	ASTM D257
Dielectric Constant @ 1KHz	5.5/4.4	5.5/4.4	5.5/4.4	5.5/4.4	5.5/4.4	ASTM D150

Standard Thicknesses:

0.020" (0.51mm)	0.030" (0.76mm)	0.040" (1.02mm)	0.050" (1.27mm)	0.060" (1.52mm)
0.070" (1.78mm)	0.080" (2.03mm)	0.090" (2.29mm)	0.100" (2.54mm)	0.110" (2.79mm)
0.120" (3.05mm)	0.130" (3.30mm)	0.140" (3.56mm)	0.150" (3.81mm)	0.160" (4.06mm)
0.170" (4.32mm)	0.180" (4.57mm)	0.190" (4.83mm)	0.200" (5.08mm)	

Consult the factory for alternate thicknesses.

Standard Sheet Sizes:

9" x 9" (229mm x 229mm) 18" x 18" (457mm x 457mm). 9" x 9" only over 0.100" thickness. Options: Fiberglass reinforcement is optional in only 0.040" thickness: "FG" suffix (Ex: T-flex™ 340-FG) metallized carrier on one side: "H" suffix (Ex: T-flex™ 340-H)

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