



PRODUCT DESCRIPTION

Tflex[™] HR400 is a cost-effective and compliant gap filler thermal interface material with excellent thermal performance and great handling for mass-production applications.

The low modulus interface pad conforms to component topography, resulting in little stress on the components, mating chassis or parts. The softness relieves mechanical stress from high stack-up tolerance and absorbs shock, resulting in improved device reliability. Tflex[™] HR400's recovery properties for applications requiring material rework result in continued mechanical integrity even after device rework and re-assembly.

Tflex[™] HR400 is naturally tacky on both sides and requires no additional adhesive coating to inhibit thermal performance. The tack is designed to hold the pad in place during assembly and component transport.

FEATURES AND BENEFITS

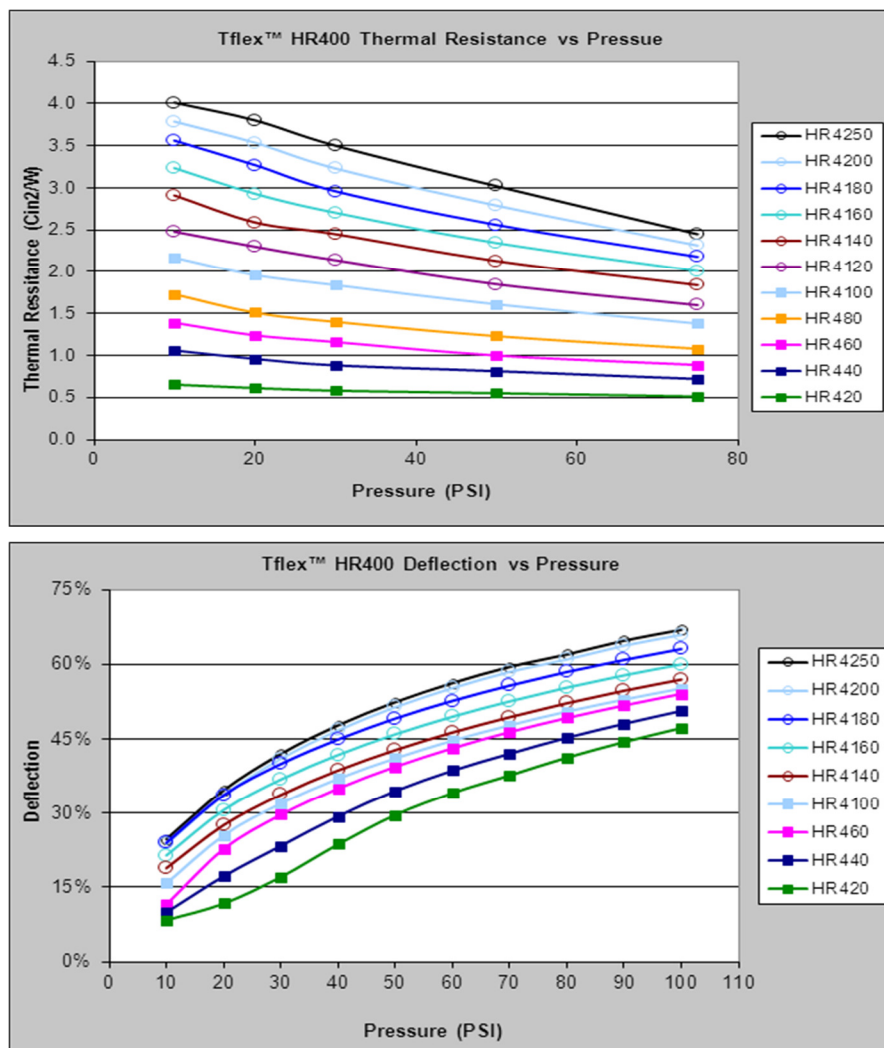
- Thermal Conductivity 1.8 W/mK
- Soft and Compliant
- Available in thicknesses from 0.020" thru 0.400" (0.5mm thru 10.2mm)
- Naturally tacky for adhesion during assembly and transport
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

SPECIFICATIONS

TYPICAL PROPERTIES	VALUE	TEST METHOD
Construction & Composition	Ceramic filled silicone sheet	N/A
Color	Dark Grey	Visual
Thickness Range	0.50mm (.020") – 8.9mm (0.350")	N/A
Thickness Tolerance	+/- 10%	N/A
Thermal Conductivity (W/mK)	1.8	ASTM D5470
Density (g/cc)	1.93	Helium Pycnometer
Hardness (Shore 00)	53	ASTM D2240
Outgassing TML (weight %)	0.32	ASTM E595
Outgassing CVCM (weight %)	0.09	ASTM E595
Temperature Range	-50°C to 160°C	Laird Test Method
Rth@ 40 mils, 10 psi	1.00 °C–in ² /W	ASTM D5470 (Modified)
Dielectric Constant @ 1 MHz	4.81	ASTM D150
UL Flammability Rating	V-0	UL 94
Volume Resistivity	2 x 10 ¹³ ohm-cm	ASTM D257

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AVAILABILITY

STANDARD THICKNESSES

- 0.5mm (0.020") to 8.9mm (0.350") thick material available in 0.25mm (0.010") increments
- Available in standard sheet sizes of 18" x 18" and 9" x 9" or custom die cut parts

OPTIONS

- DC1 proprietary tack eliminating coating
- Fiberglass is an option in the 0.020-inch and 0.030-inch thicknesses to aid in handling and is designated by the suffix "-FG"

PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. HR4xxx indicates Tflex HR400 product line with thickness in mils (0.001")

EXAMPLES:

- Tflex™ HR440 = 0.040" thick Tflex™ HR400 material
- Tflex™ HR4100,DC1 = 0.10" thick Tflex™ HR400 material with DC1 coating

Tflex HR400 DS 121317

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