



### **MID-PERFORMANCE GAP FILLER WITH 1.6 W/MK**

Tflex™ HR200 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™ HR200 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.

Tflex™ HR200 is stable from -50°C thru 160°C.

### **FEATURES AND BENEFITS**

- Thermal Conductivity 1.6 W/mK
- Soft and Compliant
- Available in thicknesses from 0.020" thru 0.320" (0.5mm thru 8.0mm)
- Naturally tacky for adhesion during assembly and transport
- Available in 18" x 18" and 9" x 9" standard sheet sizes

### **APPLICATIONS**

- Cooling components to chassis, frame, or other mating components
- Memory Modules
- Home and small office network equipment
- Mass storage devices
- Automotive electronics
- Telecommunication hardware
- Radios
- LED solid state lighting
- Power electronics
- LCD and PDP flat panel TV
- Set top boxes
- Audio and video components
- IT infrastructure
- GPS navigation and other portable devices

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**Tflex™ HR200 TYPICAL PROPERTIES**

	Tflex HR200™ PRELIMINARY	TEST METHOD
Construction	Naturally tacky Ceramic filled silicone elastomer	NA
Color	Grey	Visual
Thermal Conductivity	1.6 W/mK	Hot Disk™
Hardness (Shore 00)	50	ASTM D2240
Specific Gravity	2.4	Helium Pycnometer
Peeling Force @ 40 mil	25 g/in 35 g/in	Top Liner Bottom Liner
Thickness Range	0.020" - 0.320" (0.5 - 8.0mm)	
UL Flammability Rating	TBD	File E180840
Temperature Range	-50°C to 160°C	See reliability report
Outgassing TML	0.35%	ASTM E595
Outgassing CVCM	0.06%	ASTM E595
Coefficient Thermal Expansion (CTE)	296.54 ppm/°C	IPC-TM-650 2.4.24

**STANDARD THICKNESSES**

Standard thickness is 0.020-inch (0.5 mm) through 0.320-inch (8.0 mm) and available in 0.010-inch increments.

**OPTIONS**

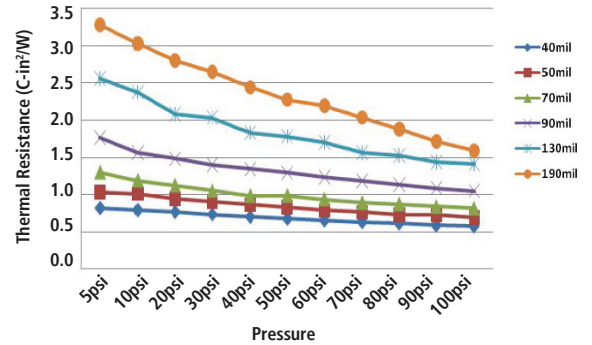
Fiberglass is standard in 0.020-inch and 0.030-inch thicknesses to aid in handling and is designated by the suffix "FG". Material is standard with both sides tacky; the "DC1" suffix indicates only one side is tacky.

**MATERIAL NAME AND THICKNESS**

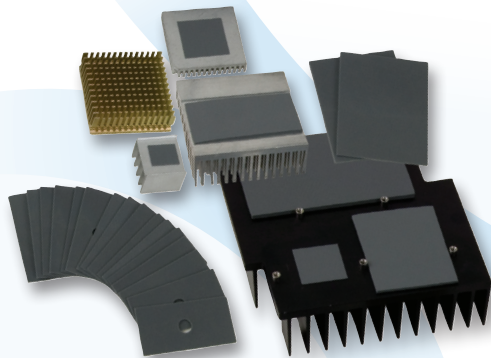
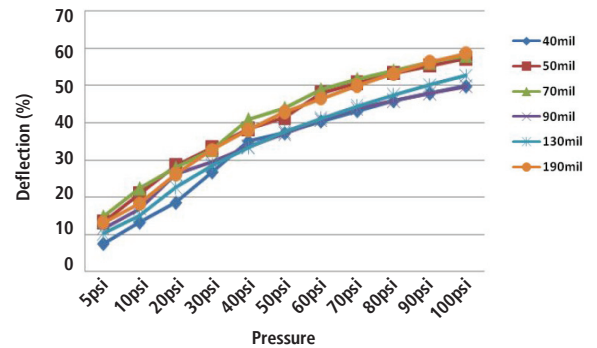
Tflex™ indicates Laird Technologies' elastomeric thermal gap filler product line. HR2XXX indicates Tflex HR200 product line with thickness in mils (0.001-inches); DC1 indicates only one side tacky; FG indicates fiberglass reinforcement.

Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.

**THERMAL RESISTANCE VS PRESSURE**



**DEFLECTION VS PRESSURE**



THR-DS-Tflex-HR200 1211

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