



### Mid-Performance Gap Filler with 3 W/mK

Tflex™ HR600 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 HR600's recovery properties for applications requiring material rework result in continued mechanical integrity even after device rework and re-assembly.

Tflex HR600 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 HR600 is electrically insulating, stable from -45°C thru 200°C, and meets UL 94V0 flame rating.

### Features and Benefits

- Thermal conductivity 3 W/mK
- Soft and compliant
- Available in thicknesses from 0.010" thru 0.200" (0.25mm thru 5.0mm)
- Naturally tacky for adhesion during assembly and transport

### 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

#### Farnell Description :

**Tflex HR620 9x9in, thickness = 0.5 mm**

**Tflex HR640 9x9in, thickness = 1.0 mm**

**Tflex HR680 9x9in, thickness = 2.0 mm**

**Tflex HR6160 9x9in, thickness = 4.0 mm**

**Tflex HR6200 9x9in, thickness = 5.0 mm**

#### Laird-PN:

**A15993-00**

**A16104-04**

**A16104-08**

**A16104-16**

**A16104-20**

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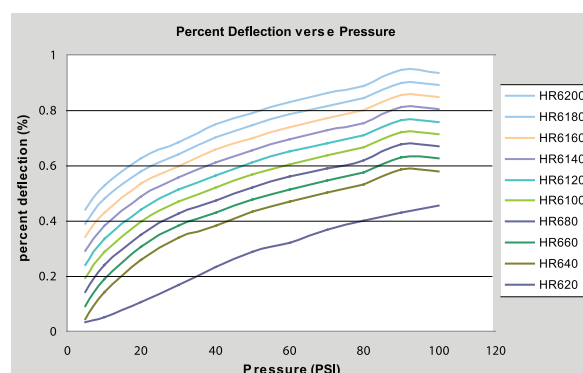
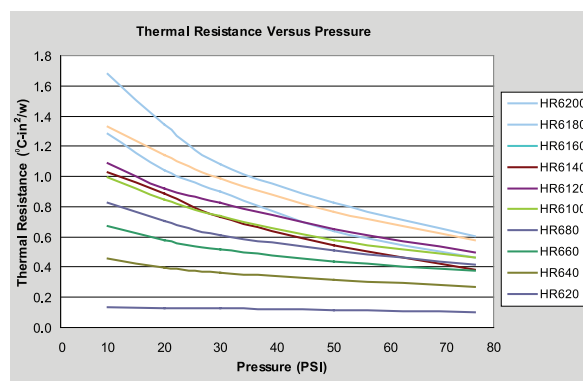
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# Tflex™ HR600 Series Thermal Gap Filler

## Tflex™ HR600 Typical Properties

|                                     | Tflex™ HR600                     | Test Method          |
|-------------------------------------|----------------------------------|----------------------|
| Construction                        | Filled silicone elastomer        | NA                   |
| Color                               | Dark Grey                        | Visual               |
| Thermal conductivity                | 3 W/mK                           | ASTM D5470           |
| Hardness (Shore 00)                 | 40<br>(at 3 second delay)        | ASTM D2240           |
| Density                             | 2.5 g/cc                         | Helium<br>Pycnometer |
| Thickness range                     | 0.010" - .200"<br>(0.25 - 5.0mm) |                      |
| Thickness tolerance                 | ±10%                             |                      |
| UL flammability rating              | 94 V0                            | UL                   |
| Temperature range                   | -45°C to 200°C                   | NA                   |
| Volume resistivity                  | 10 <sup>13</sup> ohm-cm          | ASTM D257            |
| Outgassing TML                      | 0.19%                            | ASTM E595            |
| Outgassing CVM                      | 0.07%                            | ASTM E595            |
| Coefficient Thermal Expansion (CTE) | 217 ppm/C                        | IPC-TM-650<br>2.4.24 |



## Standard Thicknesses

0.010-inch to 0.200-inch (0.25 to 5.0 mm)

0.010-inch and 0.015-inch thick materials come standard with fiberglass reinforcement designated by the suffix "FG"

## Options

Proprietary DC1 option available to eliminate tack from one side to aid in handling.

## Material Name and Thickness

Tflex™ indicates elastomeric gap filler product line

HR6xxx indicates high recovery '6 series' 3 W/mK material

FG designates Fiberglass (available in 0.010 and 0.015-inch thickness only)

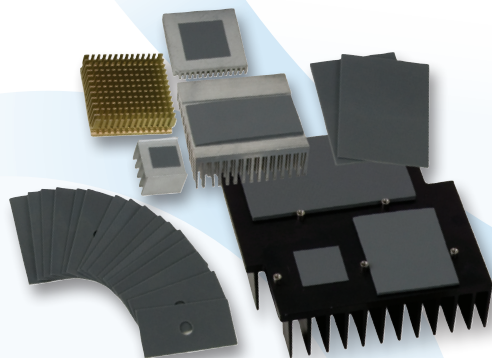
DC1 designates proprietary option eliminating tack from one side

## Examples

Tflex™ HR6120 = 0.120-inch thick material

Tflex™ HR610FG = 0.010-inch thick material with fiberglass reinforcement

Tflex™ HR6120-DC1 = 0.120-inch thick material with proprietary DC1 option



THR-DS-Tflex-HR600 1109

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