

## THIN THERMALLY CONDUCTIVE ELASTOMERIC INTERFACE MATERIAL

Tflex<sup>™</sup> 200T V0 is a specially formulated thin gap filler thermal interface material designed for thin interfaces that require a combination good thermal performance with great reliability. The elastomeric property of Tflex<sup>™</sup> 200T V0 provides good thermal performance in a thin interface where reliability and shock and vibration considerations are critical performance considerations in addition to low thermal resistance.

Tflex<sup>™</sup> 200T V0's unique silicone and ceramic filler technology allows a combination of great reliability, good thermal performance, and easy handling.

## FEATURES

- Thermal Conductivity 1.5 W/mK
- Compliant Elastomeric based thin interface material
- Available in 0.008-inch (0.2mm), 0.010-inch (0.25mm), 0.012-inch (0.30mm), 0.015-inch (0.38mm) , and 0.020-inch (0.51mm) thicknesses
- Slightly tacky for adhesion during assembly and transport
- Competitive price for high volume applications
- Available as individual custom parts, sheets, or custom parts converted on a roll

## APPLICATIONS

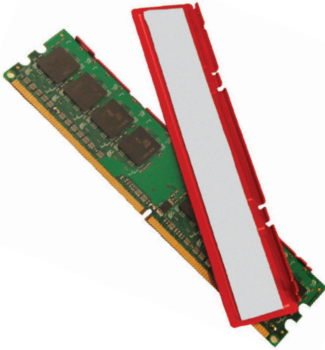
- Memory Modules: DDR2, DDR3, SDRAM, SRAM, RAM, NVRAM
- LED solid state lighting
- Power electronics

# Tflex™ 200T V0 Series

## Thermal Gap Filler

|                                     | 8 MIL                                         | 10 MIL                                        | 15 MIL                                        | TEST METHOD           |
|-------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------|
| Construction & Composition          | Ceramic filled silicone elastomer, reinforced | Ceramic filled silicone elastomer, reinforced | Ceramic filled silicone elastomer, reinforced |                       |
| Color                               | Light Grey                                    | Light Grey                                    | Light Grey                                    | Visual                |
| Thickness                           | 0.008" (0.203mm)                              | 0.010" (0.254mm)                              | 0.015" (0.381mm)                              |                       |
| Thickness tolerance                 | ±0.0015" (±0.038mm)                           | ±0.0015" (±0.038mm)                           | ±0.00225" (±0.057mm)                          |                       |
| Specific Gravity (Density)          | 2.32 g/cc                                     | 2.32 g/cc                                     | 2.32 g/cc                                     | Helium Pycnometer     |
| Hardness 3 seconds (Shore 00)       | 55                                            | 55                                            | 55                                            | ASTM D2240            |
| Outgassing TML (Post Cured)         | 0.38%                                         | 0.38%                                         | 0.38%                                         | ASTM E595             |
| Outgassing CVCN (Post Cured )       | 0.11%                                         | 0.11%                                         | 0.11%                                         | ASTM E595             |
| UL Flammability Rating              | 94 V0                                         | 94 V0                                         | 94 V0                                         | E180840               |
| Temperature Range                   | -45°C to 200°C                                | -45°C to 200°C                                | -45°C to 200°C                                |                       |
| Thermal Conductivity                | 1.5 W/mK                                      | 1.5 W/mK                                      | 1.5 W/mK                                      | Hot Disk              |
| Thermal Impedance @ 10 psi @ 69 KPa | 0.384°C-in²/W<br>2.48°C-cm²/W                 | 0.488°C-in²/W<br>3.14°C-cm²/W                 | 0.714°C-in²/W<br>4.60°C-cm²/W                 | ASTM D5470 (modified) |
| Thermal Expansion (30-150°C)        | 231.19ppm/°C                                  | 231.19ppm/°C                                  | 231.19ppm/°C                                  | IPC-TM-650 2.4 2.4    |
| Volume Resistivity                  | 3.5x10 <sup>10</sup> ohm-cm                   | 3.5x10 <sup>10</sup> ohm-cm                   | 3.5x10 <sup>10</sup> ohm-cm                   | ASTM D257             |
| Dielectric Constant @ 1 MHz         | 5.0                                           | 5.1                                           | 5.1                                           | ASTM D150             |

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



THR-DS-TFLEX-200T-V0\_0714

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