



LIGHT FLEXIBLE THERMAL GAP FILLING PADS

The Aavid SoftFlex series is our most flexible and diverse line of thermal conductive pads. The compressibility and adhesion features enable a dramatic reduction in thermal resistance when mounting. The unique flexibility of the SoftFlex base material provides exceptional contouring and excellent cushioning performance. These defining features ensure that SoftFlex Gap Fillers are ideal for dealing with uneven surfaces, parts with varying heights and devices that require greater flexibility in design, all the while reducing overall stress to the PCB and eliminating tolerances.

SIZES

SoftFlex Thermal Interface Pads are available in full 400mm x 200mm sheets that Aavid can cut and shape to suit your needs. They are also available in easy to use 25.4mm x 25.4mm (1" x 1") and 76.2mm x 76.2mm (3" x 3") pads for quick and simple assembly.

PART NUMBERS

Part Numbers for Aavid Gap Pads are made up of six sections that represent the product, thickness, adhesion and size. Instructions on how to build your part numbers are available in the document [Building an Aavid Gap Pad Part Number](#).



FEATURES:

- High Thermal Conductivity
- Reduced Thermal Resistance
- Wide Range of Hardness
- Flexible, Easy Contouring
- Single & Double Sided Adhesion
- Decreased Strain
- Puncture, Shear and Tear Resistant

SOFTFLEX PRODUCT LINE DETAILS¹

| Product Name | SoftFlex A014 | SoftFlex B016 | SoftFlex C022 | SoftFlex D021 | SoftFlex E038 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| Thermal Properties | | | | | |
| Thermal Conductivity (W/mK) | 1.4 | 1.6 | 2.2 | 2.1 | 3.8 |
| Operating Temp. Range (°C) | -40° - 150° | -40° - 150° | -40° - 150° | -40° - 150° | -40° - 150° |
| Thermal Resistance at 10psi (at % Strain) ² | 6.8 (at 24%) | 4.6 (at 39%) | 4.0 (at 28%) | 5.0 (at 19%) | 2.4 (at 18%) |
| Thermal Resistance at 20psi (at % Strain) ² | 6.0 (at 26%) | 3.7 (at 43%) | 3.4 (at 33%) | 3.9 (at 21%) | 2.0 (at 20%) |
| Thermal Resistance at 40psi (at % Strain) ² | 5.2 (at 30%) | 3.6 (at 52%) | 2.9 (at 42%) | 2.3 (at 25%) | 1.9 (at 24%) |
| Mechanical Properties | | | | | |
| Color | Blue/ Grey | Dark Grey/ Black | Pink/ Grey | Pink/ Light Pink | Grey/ Dark Grey |
| Adhesion | Single-Sided | Single-Sided | Single-Sided | Single-Sided | Double-Sided |
| Base Material | Silicone | Silicone | Silicone | Silicone | Silicone |
| Carrier / Reinforcement | PET Film | PET Film | PET Film | PET Film | PET Film |
| Hardness (ASTM D2240, Shore 00) | 36 | 37 | 34 | 48 | 71 |
| Density (g/cm ³) | 1.8 | 2.0 | 2.9 | 2.9 | 3.1 |
| Tensile Strength (kPa) | 15 | 15 | 22 | 13 | - |
| Thickness Availability (mm) | 1, 2 or 3mm | 1, 2 or 3mm | 1, 2 or 3mm | 1, 2 or 3mm | 1, 2 or 3mm |
| Electrical Properties | | | | | |
| Volume Resistivity (Ω-m) | ≥10 ¹⁰ | ≥10 ¹⁰ | ≥10 ¹⁰ | ≥10 ¹⁰ | ≥10 ¹⁰ |
| Breakdown Voltage (kVAC) | ≥10 | ≥10 | ≥10 | ≥10 | ≥10 |
| Flammability Rating UL94 | V-0 | V-0 | V-1 | V-1 | V-0 |

¹ Measurement is for 1mm thickness, information on additional thicknesses is available on request.

² Strain is the ratio of the reduction in pad thickness to the initial thickness of the pad. Thermal resistance is measured in (°C x cm²/W).