



HIGH CONDUCTIVITY THERMAL GAP FILLING PADS

These unique gap filling pads utilize a proprietary fiber orientation technology to produce highly thermally conductive materials. Our Aavid SuperThermal line of TIMs deliver the high conductivity of carbon fiber without sacrificing the flexibility and adhesion capabilities of a polymer. The SuperThermal pads and sheets are ideal for cooling high heat sources such as CPUs, GPUs and high density LEDs. This line includes pads made with specialized organic materials with extremely high thermal conductivity and low volume resistance.

SIZES

SuperThermal Interface Pads are available in full 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. For full sheet sizes please contact Aavid.

PART NUMBERS

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



FEATURES:

- Extremely High Thermal Conductivity
- Low Thermal Resistance
- Flexible, Easy Contouring
- Adhesive & Non-Adhesive Options
- Puncture, Shear and Tear Resistant

SUPERTHERMAL PRODUCT LINE DETAILS¹

Product Name	SuperThermal A072	SuperThermal B132	SuperThermal C128	SuperThermal D089
Thermal Properties				
Thermal Conductivity (W/mK)	7.2	13.2	12.8	8.9
Operating Temp. Range (°C)	-40° - 150°	-40° - 150°	-40° - 150°	-40° - 150°
Thermal Resistance at 10psi (at % Strain) ²	2.0 (at 18%)	1.1 (at 19%)	0.78 (at 9.6%)	0.98 (at 22%)
Thermal Resistance at 20psi (at % Strain) ²	1.9 (at 27%)	1.1 (at 26%)	0.72 (at 16%)	0.84 (at 24%)
Thermal Resistance at 40psi (at % Strain) ²	1.6 (at 31%)	0.98 (at 39%)	0.60 (at 30%)	0.58 (at 29%)
Mechanical Properties				
Color	Black/ Dark Grey	Grey	Black	Black
Adhesion	Double-Sided	Double-Sided	Non-Adhesive	Non-Adhesive
Base Material	Silicone	Silicone	Silicone	Silicone
Carrier / Reinforcement	PET Film	PET Film	PET Film	PET Film
Hardness (ASTM D2240, Shore 00)	63	55	65	77
Density (g/cm ³)	1.8	2.4	2.4	2.4
Tensile Strength (kPa)	33	22	16	44
Thickness Availability (mm)	1, 2 or 3mm	1, 2 or 3mm	0.5 or 1mm	0.2 or 1mm
Electrical Properties				
Volume Resistivity (Ω-m)	≥10 ¹⁰	≥10 ¹⁰	<100	<100
Breakdown Voltage (kVAC)	>1.0	>0.9	<0.1	<0.1
Flammability Rating UL94	V-0	V-0	V-0	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).





AAVID GAP FILLING PAD OPTIONS

Aavid's line of premium thermally conductive gap filling pads are available in three different product lines, each with unique attributes. Each line is available in a variety of thicknesses with multiple types of adhesion and all pads are available in 25.4mm x 25.4mm (1" x 1") and 76.2mm x 76.2mm (3" x 3") sizes as well as full sheets or custom shapes.

Aavid's smart part numbering system is designed to take each attribute in to account and quickly and easily tell you what pad you are ordering at a glance.



PART NUMBER BREAKDOWN

A **B** **C** **D** **E** **F**

PRODUCT LINE NAME

A

The three Gap Filler Pad Product Line Names are: *SoftFlex*, *SuperThermal* and *WaveBlocker*.

PRODUCT NAME

B

The Product Name is indicated on the Gap Pad Datasheets. Each Product Name consists of a letter followed by three numerical digits representing the conductivity.

THICKNESS (mm)

C

Thickness is shown as a two digit number with the second digit representing a tenth of a mm. A 1.0mm thickness would be written as "10".

ADHESION

D

Numbers indicating the type of adhesion:
"00" = Non Adhesive / "01" = Single Sided / "02" = Double Sided

LENGTH (mm)

E

Four digits representing length in mm with the last digit representing a tenth of a mm. A length of 25.4mm (1 in.) would be written as 0254.

WIDTH (mm)

F

Four digits representing width in mm with the last digit representing a tenth of a mm. A length of 25.4mm (1 in.) would be written as 0254.

EXAMPLE

A 76.2mm x 76.2mm (3" x 3") pad of SoftFlex B016 with a 1mm thickness and single side adhesion would have the part number: **SoftFlex-B016-10-01-0762-0762**.

