

# UniGap 1000

## Compliant Gap Filler



UniGap 1000 is ideal for cost sensitive applications requiring moderate thermal performance and is suitable to interface large surface areas.

UniGap 1000 is robust, highly flexible and easy to handle with 1.0 W/mK thermal conductivity. UniGap 1000 has exceptional temperature stability and vibration dampening properties making it suitable for a wide range of rugged applications. UniGap 1000 is used widely in automotive, LED, motor drive, PSUs applications plus many more.

### Features

- Compliant and electrically isolating
- Thermal conductivity = 1.0 W/mK
- Maintains good thermal performance over a temperature range of -50°C to 160°C
- Easy to handle and apply

### Availability

- Thicknesses of 0.5mm to 5.0mm in steps of 0.5mm
- Available as custom die-cut shapes
- Standard sheet sizes of 229mm x 229mm and 457mm x 457mm
- Thickness of 0.5mm is fiberglass reinforced

### Benefits

- Soft and conformable, ideal for low stress applications
- Performs well in rugged applications such as automotive and power supplies
- Naturally tacky requiring no additional coating of adhesive

### Recommended Uses

- Any gap filler application where costs need to be kept low and a moderate thermal demand exists
- Applications requiring wide temperature excursions
- Typically used to thermally connect components of varying height to a heat spreader or nearby metal work

### Typical Physical Properties

Property (unit)	Test Method	UniGap 1000 (2.0mm)
Colour	Visual	Grey
Thermal Conductivity (W/mK)	ASTM D5470	1.0
Hardness (Shore 00)	ASTM D2240	45
Thermal Impedance (°C-cm <sup>2</sup> /W @ 69KPa)	ASTM D5470	16.10
Operating Temp. (°C)	-	-40 to +150
Flame Rating	UL94	V-0

### Electrical and Mechanical Information

Property (unit)	Test Method	UniGap 1000 (2.0mm)
Tensile Strength (PSI)	ASTM D412	50
Elongation (%)	ASTM D412	61
Breakdown Voltage (Volts AC)	ASTM D149	>27k
Dielectric Constant (@1MHz)	ASTM D150	5.60
Outgassing CVCM (%)	ASTM E595	0.09
Volume Resistivity (Ω-cm)	ASTM D257	4 x 10 <sup>13</sup>



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This material is often used in these industries:



Industrial



LED



Automotive



PSU

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