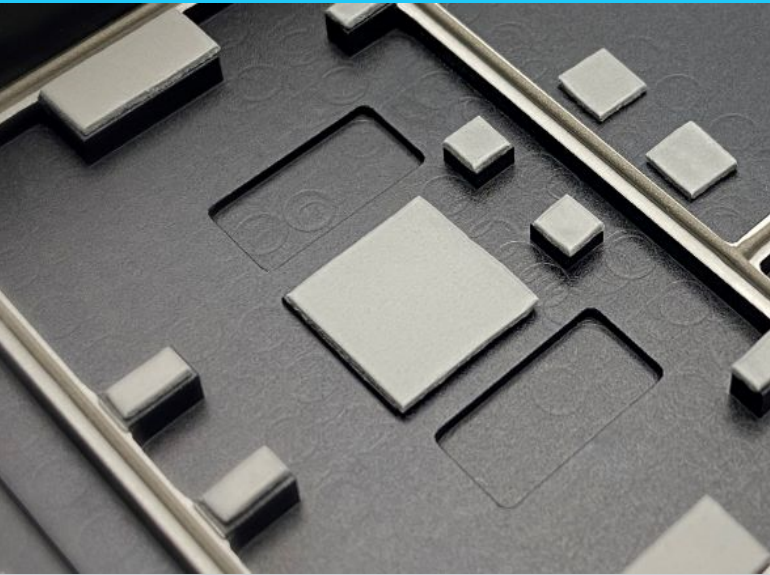


## Thermal Conductive Gap Filler Pad

## GP5000 Series



### Description

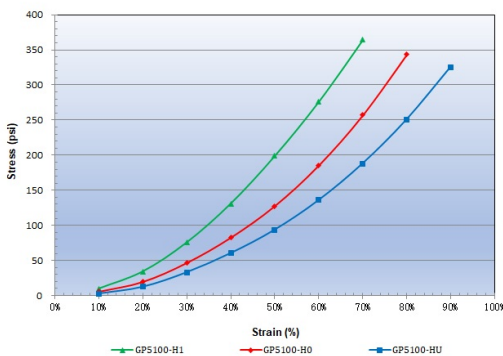
The GP5000 series contains silicone rubber with enhanced thermal conductivity 3.0 W/m-K. It is an enhanced ceramic particle filled silicone rubber containing a highly conforming and thermally conductive thermal pad. It is used between heat sink and heat generating components. The Übersoft and Ultrasoft version will fill voids and rugged surfaces, while wetting out matting surfaces in order to efficiently transfer heat from components to heat sink.

### Benefits

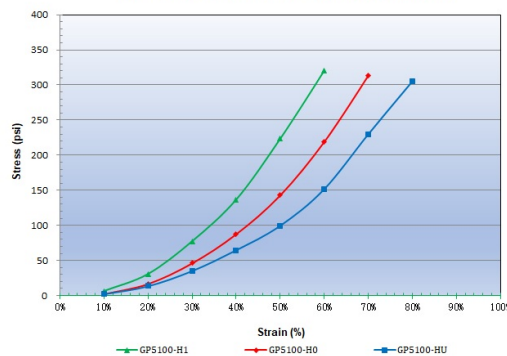
- Enhanced thermal conductivity 3.0 W/m-K
- Übersoft and Ultrasoft, highly compressible
- Provides good wetting
- Self-tacky or additional PSA available

Typical Properties of GP5000 Series	Typical Value	Test Method
Construction	Filled silicone elastomer sheet	--
Color	Light Blue	Visual
Inherent Surface Tacky	2 sides	--
Reinforcement Carrier (Optional)	G (0.25mm thick hardened skin with fiberglass woven reinforcement on one side)	--
Surface Treatment (Optional)	A0 (0.25mm thick hardened skin on one side having reduced natural tacky property) SPA0 (Spraying Boron Nitride Powders to remove natural tacky property on one side)	--
Thickness Range	0.13mm to 10mm	ASTM D374
Density	2.90 g/cm <sup>3</sup>	ASTM D792
Hardness (Optional)	H1 (Standard): 46 Shore OO	ASTM D2240
	H0 (Ultrasoft): 36 Shore OO, starts from 0.50mm	
	HU (Übersoft): 26 Shore OO, starts from 0.75mm	
Operating Temperature Range	-55 to 200 °C	TGA+DMA
Flammability Rating	V-0 (UL File E333972)	UL 94
Dielectric Strength	10 KV <sub>AC</sub> /mm	ASTM D149
Volume Resistivity	>10 <sup>14</sup> ohm-cm	ASTM D257
Thermal Conductivity (W/m-K)	3.0 W/m-K	ASTM D5470 modified
Thermal Impedance (°C-in <sup>2</sup> /W) @1.0mm @ 50 psi	H1 hardness: 0.522 °C-in <sup>2</sup> /W	
	H0 hardness: 0.404 °C-in <sup>2</sup> /W	
	HU hardness: 0.385 °C-in <sup>2</sup> /W	

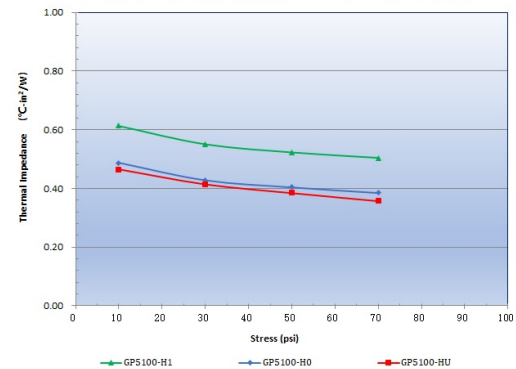
Stress Vs. Strain of GP5100-H1/H0/HU (1.0mm thick) with Constant Rate of Strain  
(@ Temp= 25-29°C; Constant Rate of Strain = 0.01 inch/min.)



Stress Vs. Strain of GP5100-H1/H0/HU (1.0mm thick) with Step Application of Strain  
(@ Temp= 25-29°C; Rate of Strain = 0.01 inch/min. between each step application of strain; stress measurement time interval of 2min. for each step application of strain)



Thermal Impedance Vs. Stress of GP5100-H1/H0/HU (1.0mm thick)  
(at Temp= 60°C; Step application of pressure 10, 30, 50, 70 psi; ASTM D 5470 modified)



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REV 1.0