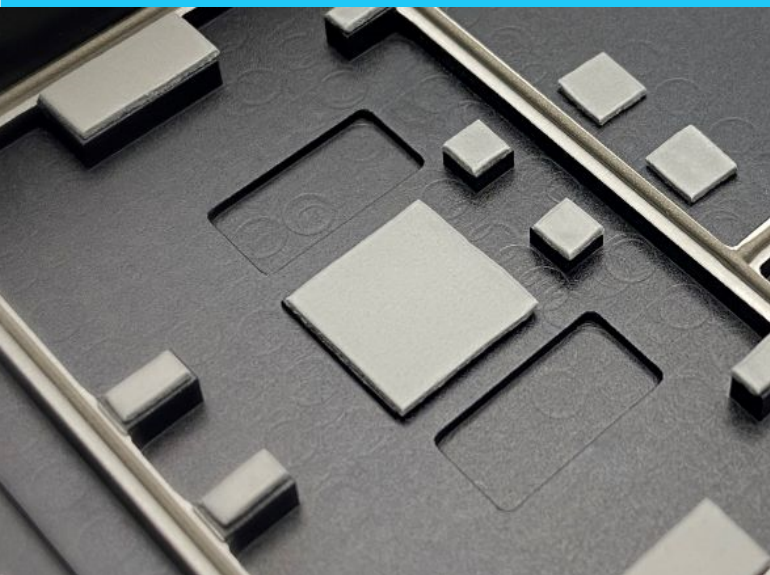


Thermal Conductive Gap Filler Pad

GP8000 Series



Description

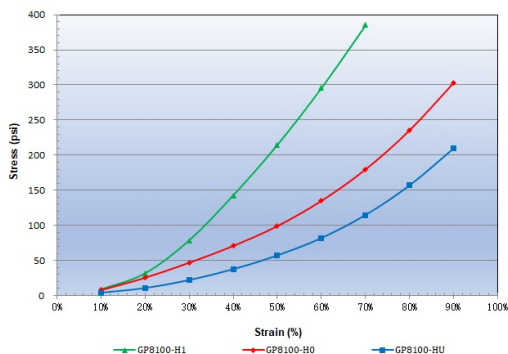
The GP8000 series contains silicone rubber with superior thermal conductivity 7.8 W/m-K. It is a specially treated high-performance particle filled silicone rubber containing an extremely conforming and thermally conductive thermal pad. It is used between heat sink and heat generating components. The Ultra soft version will fill voids and rugged surfaces, while wetting out matting surfaces in order to efficiently transfer heat from components to heat sink.

Benefits

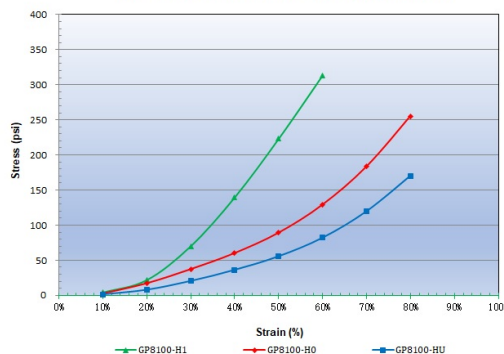
- Superior thermal conductivity 7.8 W/m-K
- Übersoft and Ultrasoft are highly compressible
- Provides good wetting
- Self-tacky or additional PSA available

Typical Properties of GP8000 Series	Typical Value	Test Method
Construction	Filled silicone elastomer sheet	--
Color	Light Gray	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	0.25mm to 10mm	ASTM D374
Density	2.5 g/cm ³	ASTM D792
Hardness (Optional)	H1 (Standard): 46 Shore OO H0 (Ultrasoft): 36 Shore OO, starts from 0.50mm HU (Übersoft): 26 Shore OO, starts from 0.75mm	ASTM D2240
Operating Temperature Range	-55 to 200 °C	TGA+DMA
Flammability Rating	V-0 (UL File E333972)	UL 94
Outgassing	TML : 0.17% ; CVCM: 0.03% ; WVR: 0.04%	ASTM E595
Dielectric Strength	100 V _{AC} /mm	ASTM D149
Volume Resistivity	>10 ¹¹ ohm-cm	ASTM D257
Thermal Conductivity (W/m-K)	7.8 W/m-K	
Thermal Impedance (°C-in ² /W) @1.0mm @ 50 psi	H1 hardness: 0.313 °C-in ² /W H0 hardness: 0.270 °C-in ² /W HU hardness: 0.220 °C-in ² /W	ASTM D5470 modified

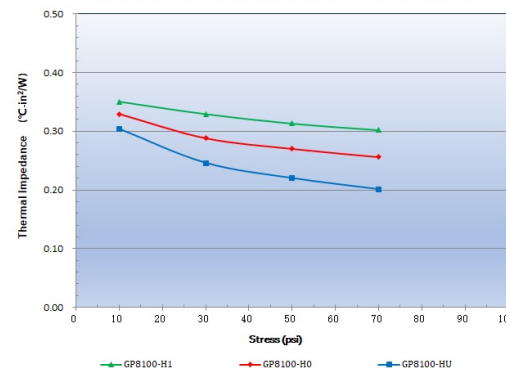
Stress Vs. Strain of GP8100-H1/H0/HU (1.0mm thick) with Constant Rate of Strain
(@ Temp=25-29°C; Constant Rate of Strain = 0.01 inch/min.)



Stress Vs. Strain of GP8100-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 GP8100-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