



# GT70PRO

Extremely Soft and Elastic Graphene Enhanced Thermal Interface Material

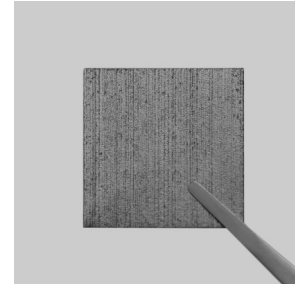
Trademark: GT-TIM®

## Features:

- Super High Thermal Conductivity
- Low Effective Thermal Resistance
- High Compressibility and Ultra Light
- Polymer Reinforced Edges

## Applications:

Cooling of dataservers, thermal Burn-In, IC thermal testing, 5G devices, automotive electronics GPU, CPU, RF, Opto module, IGBT, LED and other power modules



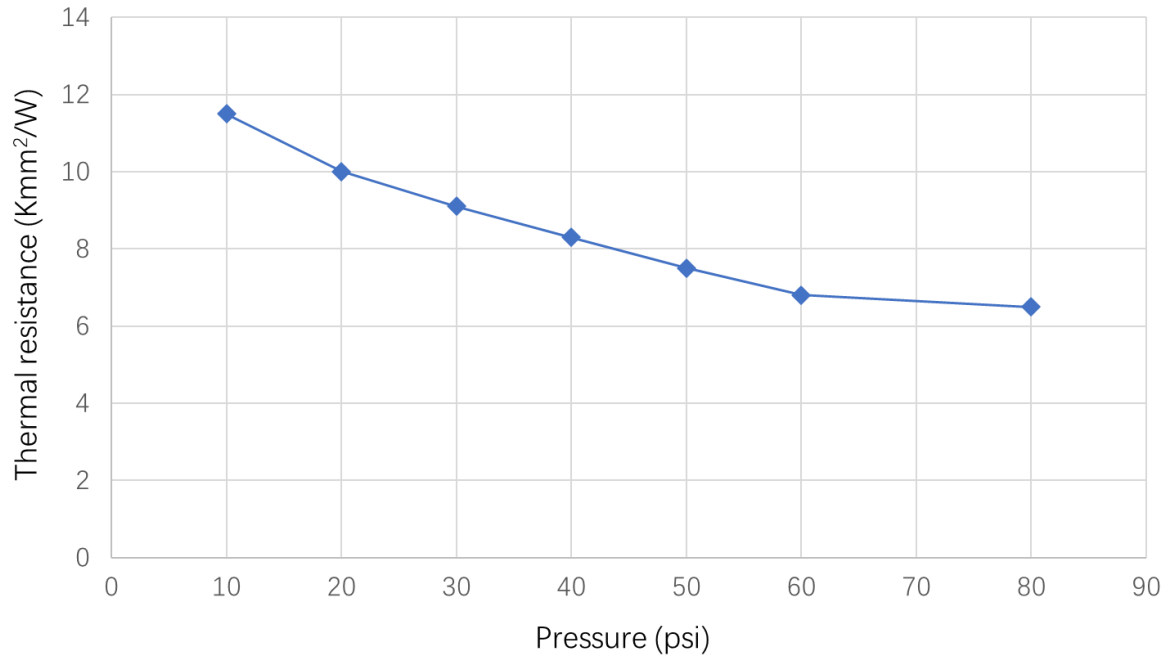
## Description:

GT70PRO is a highly soft graphene enhanced thermal interface material and has very low effective thermal resistance. Moreover, the GT70PRO has advantages of low density, low complexity during assembly and good maintainability. In this product, edges perpendicular to layered lamellae structures are reinforced with polymer coating for improving tensile strength, allowing easy handling without sacrificing performance.

Physical Properties	Value	Units	Test Method
Bulk Thermal Conductivity	70 ± 10 @40Psi(275KPa), 300µm)	W / mK	ASTM5470
Effective Thermal Resistance	11.5±1 @10Psi (69kPa), (300µm) 10±1 @20Psi (138kPa), (300µm) 8.5±1 @40Psi (275kPa), (300µm) 9±1 @30%comp, (300µm) 8.5±1 @50%comp, (300µm)	Kmm <sup>2</sup> / W	ASTM5470
Thickness Range for Production	0.2 - 2	mm	Micrometer
Thickness Tolerance	< 10	%	Micrometer
Pad Size	Up to 70 * 70	mm	-
Compressibility	> 50	%	-
Compressive Strength	207±35(30±5) @ 50%, (300µm) 172±35(25±5) @40%, (300µm) 138±35((20±5) @30%, (300µm)	KPa	At 50% compression
Recovery	> 70	%	-
Tensile Strength	> 50	KPa	Tensile tester
Surface Roughness (Ra)	1.7 ± 3	µm	Sensofar S neox
Surface Roughness (Rz)	38 ± 10	µm	Sensofar S neox
Application Temperature	-40 to 200	°C	-
Flammability	V - 0		UL94
Specific Heat	0.25 ± 0.05	J / g.K	Hotdisk
Density	0.4 ± 0.05	g / cm <sup>3</sup>	Balance and Micrometer
Color	Grey	-	Visual
Hardness	45 ± 5		Shore Durometer Shore (00)

# GT70PRO

Thermal Resistance vs Pressure (300 $\mu$ m)



The product can be supplied with adhesive bonding with liner, can be made electrically insulating but thermal conducting as well as complete adhesive film coated version. GT-TIM<sup>®</sup> is a protected trademark of Smart High Tech.



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