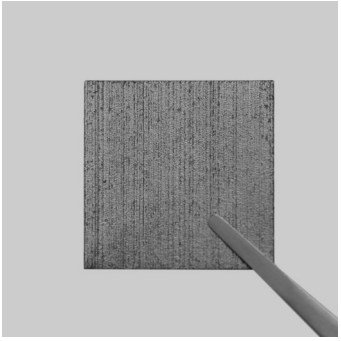
GT70

Extremely Soft and Elastic Graphene Enhanced Thermal Interface Material

Trademark: GT-TIM



Features:

- Very High Thermal Conductivity
- Very Low Effective Thermal Resistance
- High Compressibility and Ultra Light

Applications:

5G devices, Automotive electronics, GPU, CPU, RF, Opto module, IGBT, LED and other Power module cooling, Thermal Burn-In and IC thermal testing

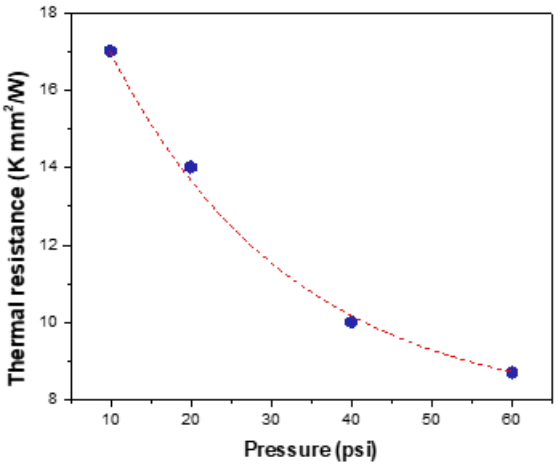
Description:

GT70 is a highly soft graphene enhanced thermal Interface material. It has very low effective thermal resistance (8,5 kmm^2/W at 275KPa). Moreover, the GT70 has advantages of low density, high recovery and extremely good softness. GT70 opens new opportunities for addressing large heat dissipation issues in electronics and other high power driven systems.

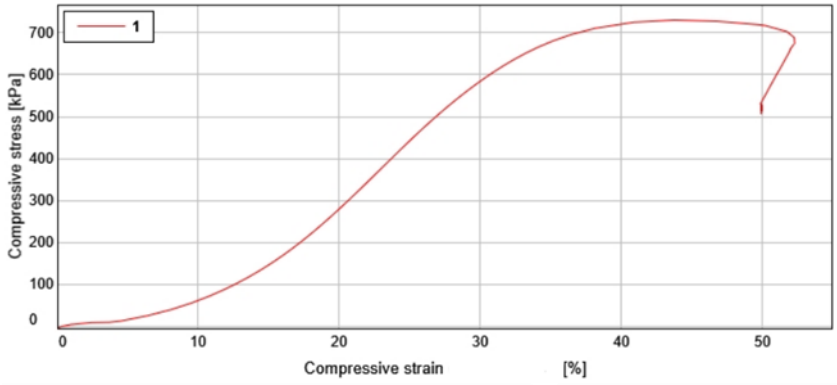
Physical Properties	Value	Units	Test Method
Bulk Thermal Conductivity	70 ± 10 (275KPa, 300µm)	W / mK	ASTM5470
Effective Thermal Resistance	8,5 ± 1,5 (275KPa, 300µm)	Kmm^2 / W	ASTM5470
Thickness for Production	0,3-2	mm	Micrometer
Thickness Tolerance	< 10	%	Micrometer
Pad Size	Up to 50 * 50	mm	-
Compressibility	> 50	%	-
Compressive Strength	200 ± 100 (300µm)	KPa	At 50% compression
Recovery	> 70	%	-
Tensile Strength	> 20 ± 5	KPa	Instron tensile tester
Surface Roughness (Ra)	5 ± 3	µm	Wyko NT1100 optical pro-filometer
Surface Roughness (Rz)	30 ± 15	µm	Wyko NT1100 optical pro-filometer
Application Temperature	-40 to 200	°C	-
Flammability	V - 0		UL94
Specific Heat	0.25 ± 0.05	J / g.K	Hotdisk
Density	0.30 ± 0.05	g / cm^3	Balance and Micrometer
Color	Grey	-	Visual

GT70

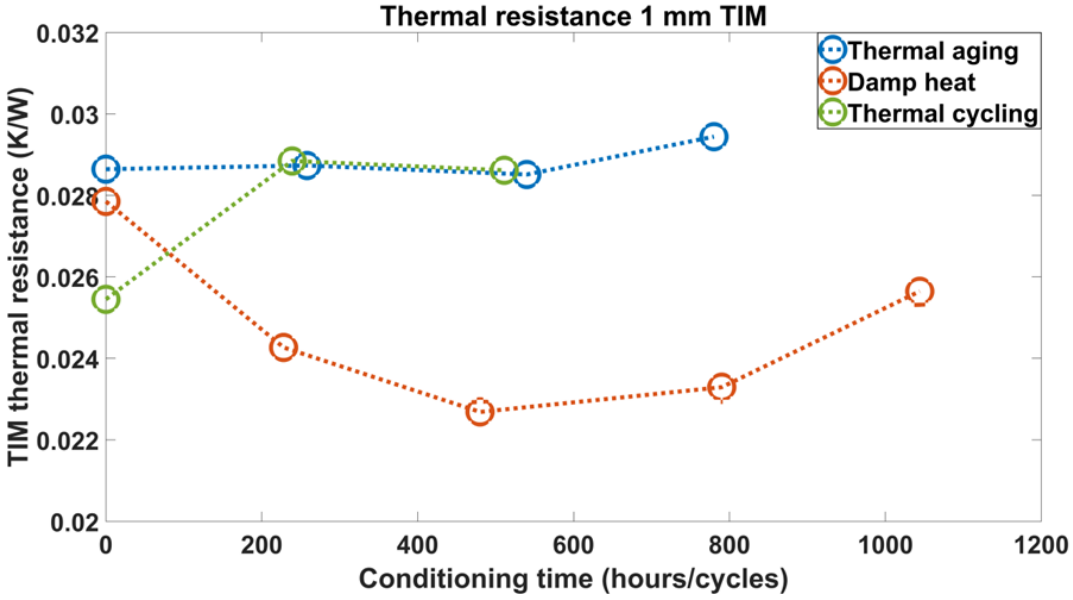
Thermal Resistance vs Pressure (300µm)



Compressive Stress vs Strain Curve at 50% compression (300µm)



Reliability testing of thermal aging at 120^{0}C, damp heat at 85^{0}C, 85%RH and thermal cycling between –40^{0}C and +125^{0}C for a pad size of 3x3 cm^2.



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