



T69-100Graphite Sheets

Version 1.280318

Graphite Sheets

T69-100 is a high performing thermal interface material which is very thin, synthetically made from a highly oriented graphite polymer film and has excellent thermal properties in both the XY and the Z axis. T69-100 is Ideal for providing thermal management in some of the most demanding of applications.

Features

Highly oriented pyrolytic graphite sheet with high thermal conductivity It is flexible and has features of ultra-thin and high EMI shielding effect Excellent thermal conductivity: 1600 W/ mK (4x as high as copper, 7x as high as aluminium)

Light weight: Specific gravity: 2.3 Flexible and easy to be cut or trimmed Low thermal resistance Low moisture content: < 1%

Applications

Electronic components: IC, CPU, MOS LED, M/B, P/S, Heat Sink LCD, TV, Notebook PC, PC Telecom Device, Wireless, etc. DDR II Module, DVD Applications, Hand-set applications, etc.

Properties

- ✓ REACH Compliant
- ✓ ROHS Compliant

Property		T69-100	Unit	Tolerance	Test Method
Thickness		100um	mm	-	Micrometer
		0.100	mm	±0.019	Micrometer
Thermal Conductivity	X-Y Direction	700	W/mK	-	AC calorimeter
	Z Direction	26	W/mK	-	Laser flash
Thermal diffusivity		8 - 10 (0.0008- .0010m²/s)	cm²/s	-	AC calorimeter
Density		0.85 (850 kg/m³)	g/cm³	-	Archimedes law
Specific heat (at 50°C)		0.85 (850J/kgk)	(J/gk)	-	-
Heat resistance		400	°C	-	-
Extensional strength	X-Y Direction	20	Мра	-	-
	Z Direction	0.4	Мра	-	-
Expansion coefficient	X-Y Direction	9.3 x 10 ⁻⁷	1/K	-	-
	Z Direction	3.2 x 10 ⁻⁵	1/K	-	-
Bending test (R5/180°C)		20000 or more	Times	-	-
Electric conductivity		20000	S/cm	-	JISK7194
Operating Temperature		-50 to 200	°C	-	-
Shelf Life		36	months	-	-

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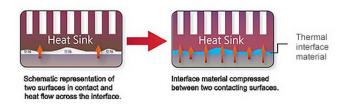
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Standard Weights & Dimensional Tolerance

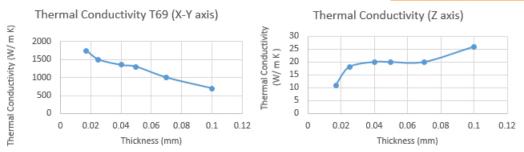
C:	Thickness (mm)	Weight (gr)	
Size	200x200x0.1	2.0	

- * All measurements in weights are in gr
- ** All sizes are in mm

Data



	Thickness (mm)	Tolerance (mm)
Die-Cut Thickness Tolerances	0.3	±0.03
	0.5	±0.05
	0.8	±0.08
	1.0	±0.1
	1.2	±0.12
	1.5	±0.15
	2.0	±0.2
	2.5 - 3.5	±0.25
	4.0 - 4.5	±0.3
	5.0	±0.35
	6.0 - 8.0	±0.4
	9.0	±0.45
	10.0	±0.5
	>10.0	±0.5



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^{*} Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.