



# T69-100

## Graphite 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- .0010m <sup>2</sup> /s)	cm <sup>2</sup> /s	-	AC calorimeter
Density		0.85 (850 kg/m <sup>3</sup> )	g/cm <sup>3</sup>	-	Archimedes law
Specific heat (at 50°C)		0.85 (850J/kgk)	(J/gk)	-	-
Heat resistance		400	°C	-	-
Extensional strength	X-Y Direction	20	Mpa	-	-
	Z Direction	0.4	Mpa	-	-
Expansion coefficient	X-Y Direction	9.3 x 10 <sup>-7</sup>	1/K	-	-
	Z Direction	3.2 x 10 <sup>-5</sup>	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	-	-

T-Global Technology Limited  
1 & 2 Cosford Business Park, Central Park,  
Lutterworth, Leicestershire LE17 4QU U.K.

Tel: +44 (0)1455 553 510

Email: sales@tglobaltechnology.com

Web: www.tglobaltechnology.com

Skype: tglobal.technology

VAT #: GB 116 662 714



# T69-100 Graphite Sheets

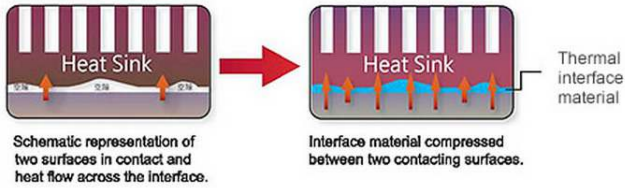
## Standard Weights & Dimensional Tolerance

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

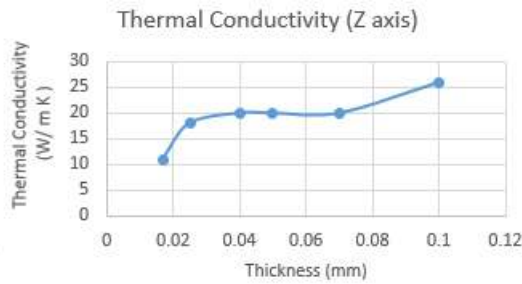
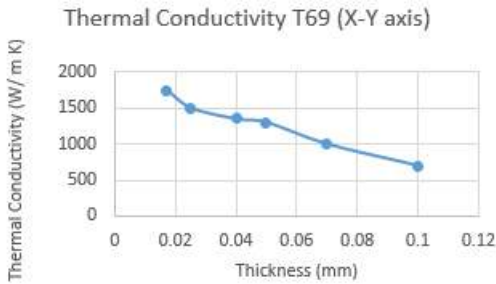
\* All measurements in weights are in gr

\*\* All sizes are in mm

## Data



Die-Cut Thickness Tolerances	Thickness (mm)	Tolerance (mm)
	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	



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

NOTICE: The information contained herein is to the best of our knowledge true and accurate. However, since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented without guarantee or responsibility on our part and users should make their own test to determine the suitability of our products in any specific situation. This product is sold without warranty either expressed or implied, of fitness for a particular purpose or otherwise, except that this product shall be of standard quality, and except to the extent otherwise stated in T-Global Technology Europe and North America's invoice, quotation, or order acknowledgment. We disclaim any and all liabilities incurred in connection with the use of information contained herein, or otherwise. All risks of such are assumed by the user. Furthermore, nothing contained herein shall be construed as a recommendation to use any process or to manufacture or to use any product in conflict with existing or future patents covering any product or material or its use.