Graphene In-Plane Film:AT1100–70

1. PRODUCT STRUCTURE

2. TECHNICAL DATA

Properties	Unit	Value	Measurement Method	Inspection Frequency
Thermal Conductivity (in-plane)	W/m·K	1200± 100	Based on ASTM E1461	20 pcs/batch & 6 point/pcs
Thickness	μm	70 ± 7 Customizable Thickness	Calculate the average thickness by measuring 9 points of the thickness of one sample by micrometer and feeler gauge. The number of measured samples is 3.	20 pcs/batch & 6 point/pcs
Density	g/cm^3	2.0 ± 0.1	ASTM D792	20 pcs/batch & 1 time/pcs
Thermal Diffusivity	mm^2/s	≧650	NETZSCH equipment	20 pcs/batch & 1 time/pcs
Operating Temperature	℃	-40°C to 150°C	IEC 60068-2-14	20 pcs/batch & 1 time/pcs
Bending test	-	$>2 \times 10^5$	Based on ASTM F2749, R = 1 mm, 180°, 1,000 cycles.	20 pcs/batch & 1 time/pcs
Electrical Conductivity	S/m	$>5 \times 10^5$	Based on ASTM D4496	20 pcs/batch & 1 time/pcs
Specific Heat	J/g · K	0.85	(Reference value)	-

All information and property values are based on tests that Global Graphene Group (G3) believes to be reliable. However, these values are provided for reference purposes only and do not constitute a guarantee by the manufacturer. Customers should conduct their own tests to determine the suitability of the products for their specific applications. Please contact our technical service department for further information regarding G3's products.

3. PROPERTIES & APPLICATIONS

Properties	Applications
▪ Lightweight ▪ High in plane thermal conductivity, higher thermal conductivity than Cu and Al (depends on the compressibility) ▪ High flexibility, suitable for curved surface	▪ Thermal interface materials: thermal transfer and heat dissipation for computers, portable electronics, large display, LED lighting, and any application requiring thermal management ▪ Barrier film ▪ EMI shielding ▪ Filtration

4. CAUTION

Please storage product at room temperature (5 - 40℃) with low humidity.

5. NOTE

[1] Including 1 sheet (full size) for each batch as inspection sample.

[2] Product expiration date：1 year.

[3] **Disclaimer:**

All technical information and data presented herein are based on our internal laboratory testing and are provided for reference purposes only. Such information and data do not constitute any legal basis, representation, warranty, or guarantee. Before use, customers should conduct appropriate testing and verification under their own specific application conditions and requirements to confirm product suitability

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