



TG-P10050

Graphene

RoHS Compliant

Features

- Ultra thin and low mass
- Applicable for unventilated design
- No dusting issue

Applications

Suitable for products requiring flat temperature

Electronic Components - 5G, Aerospace, AI, AIoT, AR/VR/MR/XR, Automotive, Consumer Devices, Datacom, Electric Vehicle, Electronic Products, Energy Storage, Industrial, Lighting Equipment, Medical, Military, Netcom, Panel, Power Electronics, Robot, Servers, Smart Home, Telecom, etc.

Properties

Properties	Unit	TG-P10050	Tolerance	Test Method
Thermal Conductivity (XY axis)	W/m-K	1500~1800	-	AC Calorimeter
Thermal Conductivity (Z axis)	W/m-K	12	-	Laser Flash
Total Thickness	μm	50	-	Handheld Thickness Gauge
Copper Foil Thickness	μm	35	-	Handheld Thickness Gauge
Coating Thickness	μm	15	-	Handheld Thickness Gauge
Vertical Resistivity (XY axis)	Ohm-inch ²	2.57	-	QJ1523-1988
Parallel Resistivity (Z axis)	Ohm-inch ²	0.66	-	QJ1523-1988
Cross-cut Tape Test	-	4B	-	ASTM D3359B
Pencil Hardness Test	-	2H	-	ASTM D3363
Solvent Resistance (Alcohol)	-	Pass(5 times)	-	ASTM D5402
Rubber Abrasive Test	-	Pass(150 times)	-	ASTM D7835
High Temperature & Humidity Test @85° C/85%RH	-	Pass(500 hrs)	-	IEC-60068-2-78
Thermal Shock Test @-20~+80° C	-	Pass(500 cycles)	-	IEC-60068-2-14
Working Temperature	° C	-20~+120	-	ISO 16750-4

※Die-cut for different shapes

T-Global Technonology Co., Ltd.

No.33, Ln.50, Daren Rd., Taoyuan Dist., Taoyuan City 330058, Taiwan

T +886-3-361-8899 E service@tglobalcorp.com W www.tglobalcorp.com

Version20
20250418

NOTICE: The information contained herein is to the best of our knowledge true and accurate. Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. All specifications are subject to change without notice. The protective film and release paper do not affect the function of the product. If there is no special requirement, the default depends on T-Global. Since the varied conditions of potential use are beyond our control, all recommendations or suggestions are presented with out 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'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.