

PT310

Natural Graphite Sheet

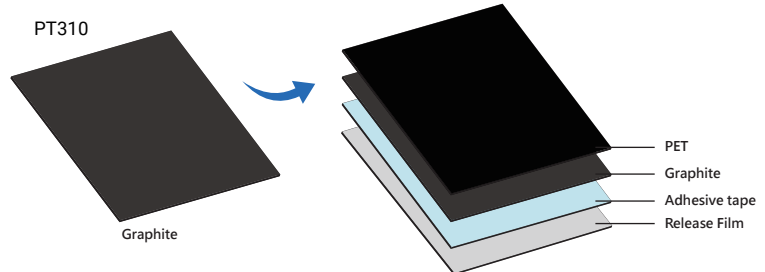
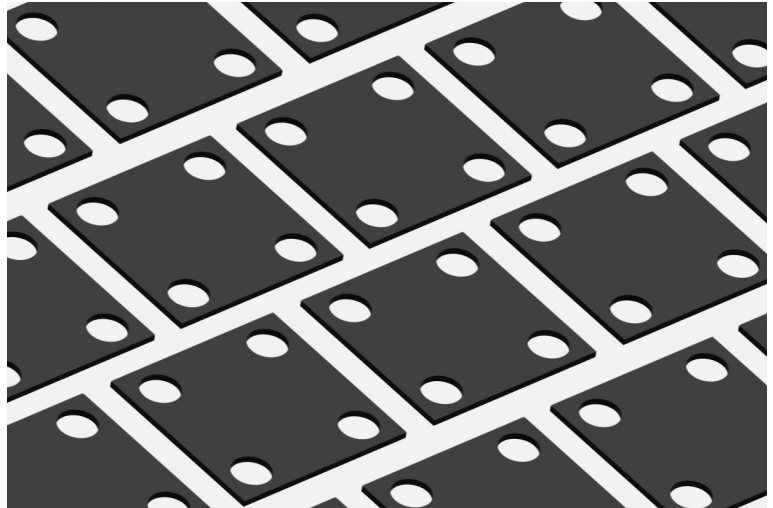
LiPOLY PT310 Natural graphite sheets have the characteristics of thinness, lightweight, and high thermal conductivity. The thermal conductivity coefficient on the X and Y axes is as high as 400 W/m*K, which can spread heat energy quickly and evenly to achieve the heat dissipation effect. PT310 can be attached to any flat or curved surface and can be cut in any form according to customer needs. It is especially suitable for thin products or 3C electronic products with limited space.

■ FEATURES

- Thermal conductivity: 400 W/m*K
- / Good average temperature
- / Easy to assemble
- / Lightweight, Specific gravity 1.6 g/cm³
- / Excellent thermal diffusion coefficient, up to more than 2 cm²/s, twice that of copper.

■ TYPICAL APPLICATION

- / Smart phones, Mobile phones
- / LED, DVD appliance
- / Hand held devices
- / 5G base station & infrastructure
- / EV electric vehicle



■ SPECIFICATIONS

- / Roll form / Sheet form
- / Die-cut parts

■ TYPICAL PROPERTIES

Single-sided adhesive or PET can be added according to needs

PROPERTY	PT310				TEST METHOD	UNIT
Color	Black				Visual	-
Thickness	100	150	250	500	Micrometer	μm
Density	1.6	1.6	1.6	1.6	ASTM D792	g/cm ³
Application temperature	-60~400	-60~400	-60~400	-60~400	-	°C
Tensile strength	270	270	270	270	ASTM D412	psi
Bending strength	10000	10000	10000	10000	-	-
ROHS & REACH	Compliant	Compliant	Compliant	Compliant	-	-
ELECTRICAL						
Electrical conductivity	2000	2000	2000	2000	JIS K7194	S/cm
THERMAL						
Thermal conductivity XY axis	420	400	400	380	AC calorimeter	W/m*K
Thermal conductivity Z axis	15	15	15	15	Laser flash	W/m*K
Thermal diffusivity	8	8	8	8	AC calorimeter	cm ² /s
Heat capacity	0.075	0.075	0.075	0.075	-	J/g*K

Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY. Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance and quality required for the purchaser's specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY material or product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright LiPOLY.