

# GRAPHITE PT310-400

## Natural Graphite Sheet

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/cm<sup>3</sup>
- / Excellent thermal diffusion coefficient, up to more than 2 cm<sup>2</sup>/s, twice that of copper.

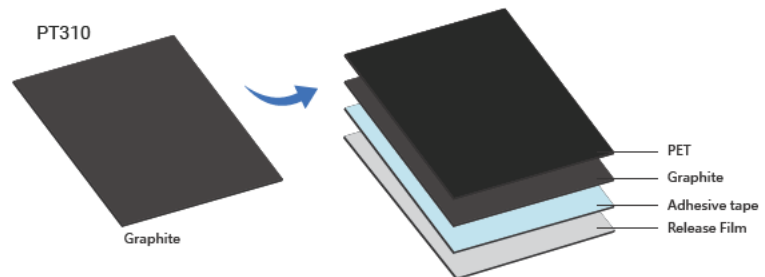
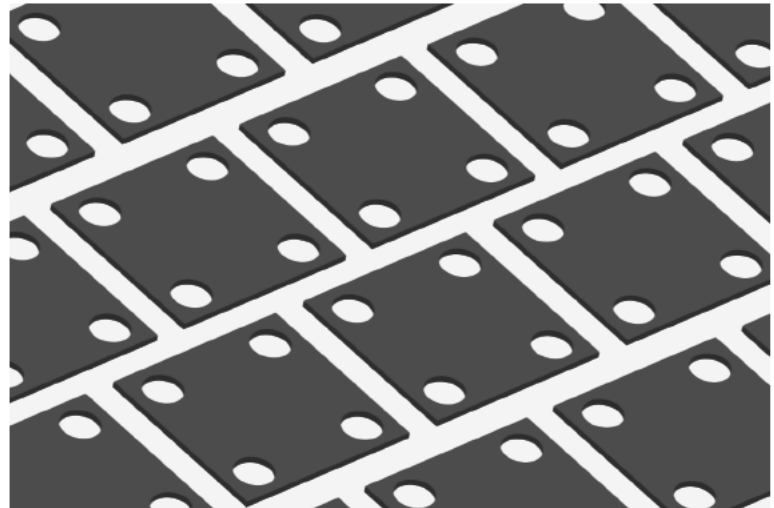
### TYPICAL APPLICATION

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

### HOW TO ORDER

Patron GRAPHITE PT310-400 XXX-YYY-ZZmm  
XXX = width in mm  
YYY = depth in mm  
ZZ = thickness in mm

<https://www.patron-components.com/>



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

### TYPICAL PROPERTIES

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 <sup>3</sup>
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 <sup>2</sup> /s
Heat capacity	0.075	0.075	0.075	0.075	-	J/g*K