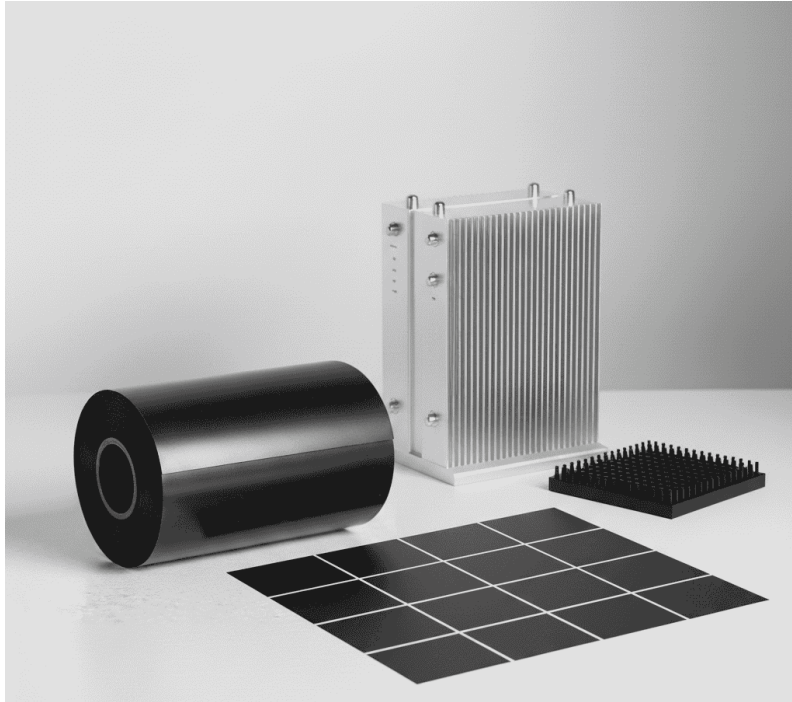


Graphite Thermal Sheet

GRF-series 10-15 W/mK (z-axis)



Product Highlights

- High thermal conductivity, surpassing natural graphite
- Excellent heat resistance with no volatile emissions and no contamination
- Customizable shapes according to customer specifications

Applications

- Smartphones
- Tablet PCs
- Vapors and radiators
- Electromagnetic shielding
- (IGBTs)

The GRF series is a synthetic graphite material recognized for its extremely high in-plane thermal conductivity. Its horizontal carbon layers form a regular hexagonal structure, allowing thermal conductivity of up to 1,800 W/m·K along x-y plane

The GRF's outstanding performance makes it perfect for high-efficiency heat dissipation applications. It can also come with a one-sided adhesive, simplifying handling and installation.

GRF-series 10-15 W/mK (z-axis)

Specifications Table

Item	GRF150S					GRF100S					Test Method
Physical Property											
Colour	Black					Black					Visual
Material	Synthetic Graphite					Synthetic Graphite					–
Operating Temperature (°C)	-55~+400					-55~+400					–
Hardness	90 Shore A					90 ShoreA					ASTM D2240
Thickness (mm)	0.012	0.017	0.025	0.04	0.05	0.085	0.09	0.1	0.11	0.12	ASTM D374
Raw Material Width (mm)	100	130	140	140	140	100	130	140	140	140	–
Density (g/cm³)	2.17	2.13	2.1	1.8	1.7	2.17	2.13	2.1	1.8	1.7	ASTM D792
Tensile Strength (PSI)	900	900	900	900	900	900	900	900	900	900	ASTM D412
Fold Durability (R5/180°)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	–
Electrical Performance											
Volume Resistivity (ohm-cm)	11×10 ⁻³					11×10 ⁻³					ASTM D257
Conductivity (S/cm)	19000					20000					–
Breakdown Voltage	>4000AC					>4000AC					ASTM D149
Thermal Performance											
X-Y Axis Thermal Conductivity (W/m·K)	1800	1700	1500	1300	1100	1800	1700	1500	1300	1100	Hot Disk
Z Axis Thermal Conductivity (W/m·K)	15					10					ASTM D5470
Specific Heat Capacity (J/(Kg·K))	710					710					ASTM D2766
RoHS	Yes					Yes					–