

*Using breakthrough technology,
we aim for products that will create new markets.*

New Product News

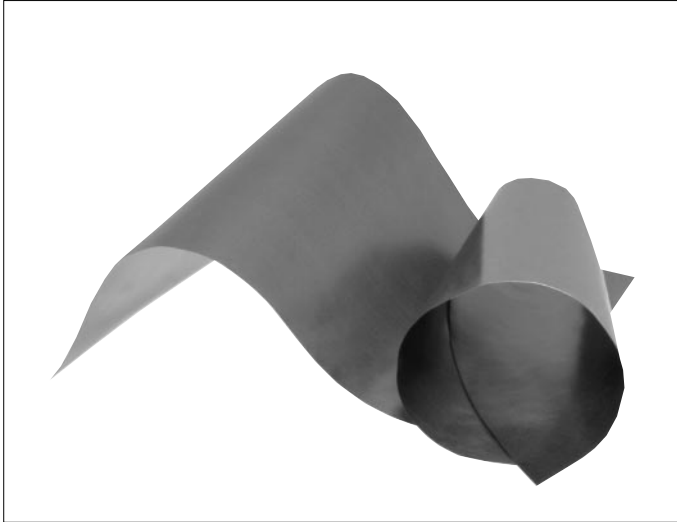
Wider product range

Thermal-transfer and electromagnetic-shield sheet

PGS Graphite Sheet

Industry/Field: Mobile communications, AV, Automotive electronics,
Home electric appliances, Industrial equipment

Thin and High Thermal Conductivity PGS Graphite Sheet



• **Development Target:**

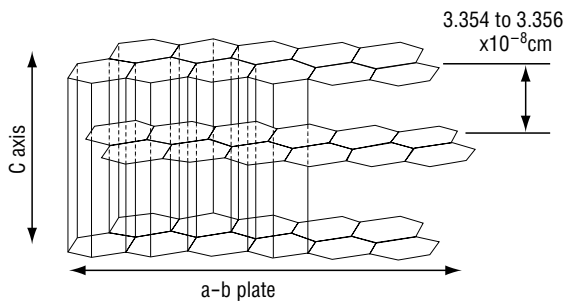
Thermal and Noise Design for Thin Mobile Equipment

• **Features:**

- ① Industry-leading levels of High thermal conductivity (1600W/m·K)
- ② High electric field shield characteristic (90dB or more 10 to 6000MHz)
- ③ Various engineered sheets (Size / Adhesion / Insulation)

• **Number of industrial property rights: 1(Pending)**

• **Construction:**



• **Characteristics/specifications:**

Items		PGS 100μm	PGS 70μm	PGS 25μm
Thermal conductivity (W/m·K)	X, Y direction	600 to 800	750 to 950	1500 to 1700
	Z direction	15	15	(15)
Thermal diffusivity (cm ² /s)		9 to 10	9 to 10	9 to 10
Density (g/cm ³)		0.85	1.10	2.10
Specific Heat (at 50 degrees C)(J/gK)		0.85	0.85	0.85
Heat resistance (in Air)(degrees C)		400	400	400
Pull strength (MPa)	X, Y direction	19.6	22.0	30.0
	Z direction	0.4	0.4	0.1
Bending test (times) R5 180 degrees		Over 30000	Over 30000	Over 30000
Electric conductivity (S/cm)		10000	10000	(20000)

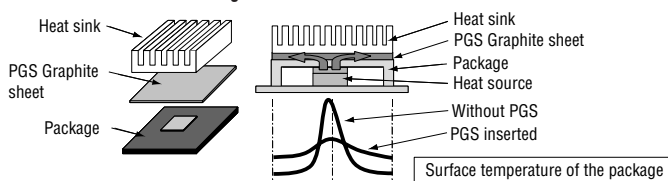
• **Applications/usage examples:**

- Thermal, heat equalizing and noise design for Mobile phone, DSC, DVD, PC, Manufacturing equipment

[Thermal Transfer] Thermal transfer from heat source. Thermal spread to X-Y directions



[Thermal Interface] Decreasing thermal resistance between heat source and heat sink



• **Explanation of part numbers:**

1	2	3	4	5	6	7	8	9	10	11	12
E	Y	G	S	1	8	2	3	0	3		
Product code			From	Shorter Side (cm)	Longer Side (cm)	Thickness		Design Number			
S	PGS only			03	25 μm						
L	PET-Covered			07	70 μm						
A	Tape attached			10	100 μm						
M	Multi-layered										