S-G-40 – A0/A1 SYNTHETIC GRAPHITE

A carbon based; high-junction crystalline graphite film prepared by graphite synthesis under extremely high temperatures. It is an ideal thermally conductive interface for eliminating local hot spots.

Product Introduction

S-G-40 is a thermally conductive Synthetic Graphite film which enables electronics equipment to achieve miniaturisation, flatness and lightness. Widely used in small gaps, where electrical isolation is not required, to meet engineers demands for thin and light electronics products with superior levels of thermal efficiency. The anisotropy of Synthetic Graphite results in strong values of thermal conductivity in the Z direction, combined with superior levels in the X-Y direction for efficient heat spreading.

Product Features

- The thermal conductivity is 1100-1300 W/M.K
- Flexible sheet, can be processed into various shapes, good bending performance
- Density 1.6-1.8 g/cm^3(approximately 1/3-3/4 of aluminium or 5-1/4 of copper)
- Low resistance, can be used for electromagnetic shielding

The Product Application

Can be widely used in large communication equipment and peripheral equipment, desktop computers, tablet computers, smart phones, mobile terminals, high-power LED.

PROPERTIES	TEST METHOD	UNIT	S-G-40
Material			Synthetic Graphite
Colour	Visual		Dark Grey
Thickness (±10%)	ASTM-D374	mm	0.04
Thermal Conductivity (X-Y axis)	ASTM-D5470	W/mK	1100 - 1300
Thermal Conductivity (Z axis)	ASTM-D5470	W/mK	15-20
Hardness (± 10%)	ASTM-D2240	Shore 00	85
Density	ASTM-D792	g/cm^3	1.6-1.8
Specific Heat Capacity (50°C)	/	J/kg.K	0.85
Working Temperature (Flammability V0 UL94)		°C	-40 - 400
Tensile Strength	ASTM-D412	Mpa	650

Storage and transportation: Store in a cool, dry place. This product belongs to non-dangerous goods, can be transported as a general chemical. After the shelf life of the product should be confirmed whether there is abnormal before use.

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