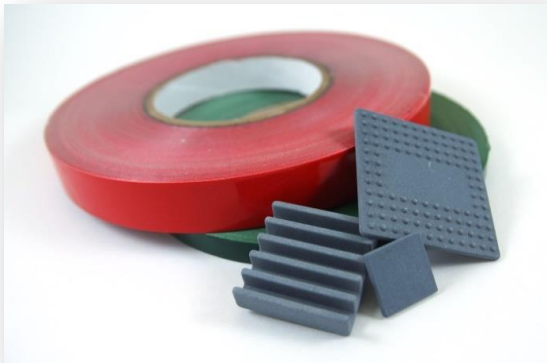


XL-25 Ceramic Heat Spreader



Features

- Open-porous structure increases air contact area ☑
- Best for limited space
- High breakdown voltage/ high resistance
- Good thermal conduction/ Low thermal expansion coefficient
- EMI reduction
- High reliability

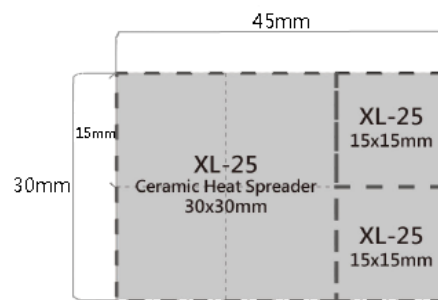
Applications

Electronic components: IC, CPU, MOS, LED, Mother Board, Power Supply, Heat Sink, LCD-TV, Notebook, PC, Telecom Device, Wireless Hub etc.

Get the size you need as below!

Standard Sizes (mm)

- | | |
|----------------------|--------------------------|
| 01. 10x10x2.0 (Flat) | 10. 30x30x5.0 (Fin) |
| 02. 15x15x2.5 (Flat) | 11. 35x35x10.0 (Fin) |
| 03. 15x15x5.0 (Fin) | 12. 40x40x2.5 (Flat) |
| 04. 20x15x2.0 (Flat) | 13. 40x40x3.0 (Embossed) |
| 05. 20x20x2.0 (Flat) | 14. 40x40x5.0 (Fin) |
| 06. 20x20x2.5 (Flat) | 15. 40x40x10.0 (Fin) |
| 07. 22x22x2.5 (Flat) | 16. 50x50x3.0 (Embossed) |
| 08. 30x30x2.0 (Flat) | 17. 50x50x5.0 (Fin) |
| 09. 30x30x2.5 (Flat) | 18. 50x50x10.0 (Fin) |

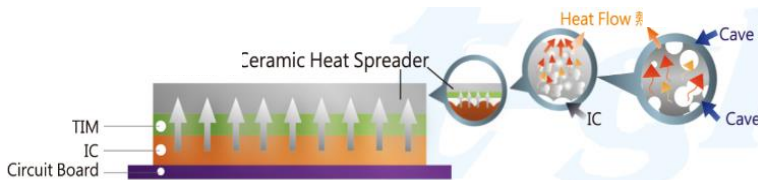


Properties

◆ REACH Compliant ◆ RoHS Compliant

Properties	XL-25	Unit	Tolerance	Test Method
Thermal Conductivity	10	W / mK	±0.67	-
Color	Gray/Green	-	-	Visual
Dielectric Breakdown Voltage	500	Voltage	-	ASTM D149
Bulk Density	1.89	g / cm ³	±0.18	CNS 619
Flexural Strength	47.5	Kgf / cm ²	-	CNS 12701
Porosity	25	%	-	CNS 619
Water Absorption	16	%	-	CNS 619
Working Temperature	<500	°C	-	-
Linear Thermal Expansion Coefficient	4.13	10 ⁻⁶	-	RT~300°C
Main Composition	SiC/Al ₂ O ₃ /SiO ₂	-	-	-
Hardness	5~6	Moh's	±0.6	DIN En101-1992

The Mechanism of Ceramic Heat Spreader



$$Q_t \propto S \times A$$

Qt: The heat would be taken by air flow.

S: Air flow(m/s)

A: Air contact area (m²)

Aca: Air contact (m²) of ceramic heat sink

Aal: Air contact (m²) of aluminium heat sink

$$Aca \cong 5 \times Aal$$

The air-contact area of ceramic heat spreader is nearly 5 times of aluminum heat sink, when they have the same volume. In the same air flow, ceramic heat spreader can provide more air-contact area. When A is bigger, Qt would be bigger, Qt would be bigger.

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Thermal Interface Materials: Thermal Pad, Thermal Tape, Thermal Grease, Ceramic Heat Spreader

