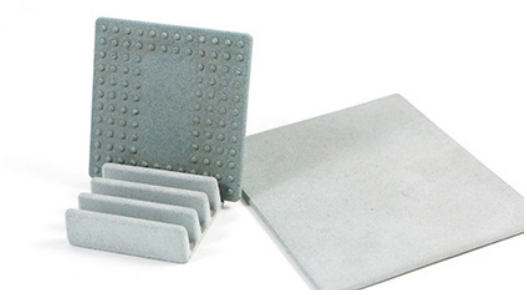


XL-25

Ceramic Heat Spreader

REACH Compliant | RoHS Compliant

Features

- Open-porous structure for more air-contact area
- Best for limited space
- High breakdown voltage & high surface impedance
- Low thermal expansion coefficient
- EMI suppression
- Durable for thermal shock

Applications

Can adapt to dramatic environmental changes

Electronic Components - 5G, Aerospace, AI, AIoT, AR/VR/MR/XR, Automotive, Consumer Devices, Datacom, Electric Vehicle, Electronic Products, Energy Storage, Industrial, Lighting Equipment, Medical, Military, Netcom, Panel, Power Electronics, Robot, Servers, Smart Home, Telecom, etc.

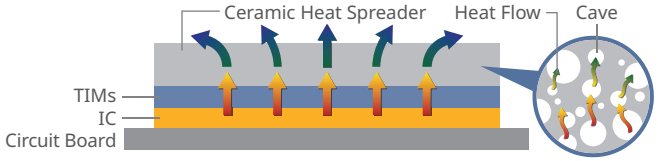
Standard Sizes (mm)

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

Mechanism

Aca ≒ 5 x Aal

The air-contact area of ceramic heat spreader is nearly 5 times of aluminum heat sink, under the same volume. In the same condition of air flow rate, ceramic heat spreaders can perform better. The more contact areas, the more heat can be exchanged by the cooler air.



Qt ∞ S x A
Qt: The heat would be taken by air flow.
S: Air flow(m/s) A: Air contact area (m2)
Aca: Air contact (m^2) of ceramic heat sink
Aal: Air contact (m^2) of aluminium heat sink

Properties

Properties	Unit	XL-25	Tolerance	Test Method
Thermal Conductivity	W/m·K	10	±0.67	-
Color	-	Gray/Green	-	-
Dielectric Breakdown Voltage	kV/mm	≥0.5	-	ASTM D149
Bulk Density	g/cm^3	1.89	±0.18	CNS 619
Flexural Strength	kgf/cm^2	47.5	-	CNS 12701
Porosity	%	25	-	CNS 619
Water Absorption	%	16	-	CNS 619
Operating Temperature	° C	<500	-	-
Linear Temperature Expansion Coefficient	10^{-6}	4.13	-	RT~300° C
Main Composition	-	$SiC/Al_2O_3/SiO_2$	-	-
Hardness	Moh's	5~6	±0.6	DIN En101-1992

※For special sizes, please contact us.

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