

Product Description

VOT VK-X8S represents the absolute pinnacle of elastomeric thermal interface technology, specifically engineered for mission-critical applications where thermal bottlenecks are the primary design constraint. Delivering a groundbreaking thermal conductivity of 9.0 W/m-K while maintaining an ultra-compliant Shore OO 15 hardness, VK-X8S achieves a rare and elite synergy of extreme heat dissipation and zero-stress compression.

Despite its massive thermally conductive filler loading, VK-X8S avoids the brittle or "mud-like" characteristics typical of ultra-high K materials. By integrating VOT's proprietary Advanced Structural Matrix Technology, the pad maintains remarkable cohesive strength. This ensures precise die-cutting, clean release from liners, and flawless handleability during high-speed assembly. Operating as a pure, siloxane-free solution (D3-D20 Non-Detectable), VK-X8S is the definitive, no-compromise thermal solution for next-generation architectures that demand the absolute highest level of thermal, physical, and chemical reliability.

FEATURES & BENEFITS

● Breakthrough Thermal Performance:

Elite 9.0 W/m-K conductivity shatters thermal bottlenecks in extreme power-density designs.

● Ultimate Zero-Stress Conformability:

The Shore OO 15 formulation yields under minimal pressure, entirely eliminating mechanical stress on ultra-fragile bare dies and dense multi-chip modules (MCM).

● Uncompromised Structural Integrity:

Advanced Structural Matrix prevents tearing, stringing, or deformation, ensuring premium handleability despite its ultra-soft nature.

● Flawless Interfacial Wetting:

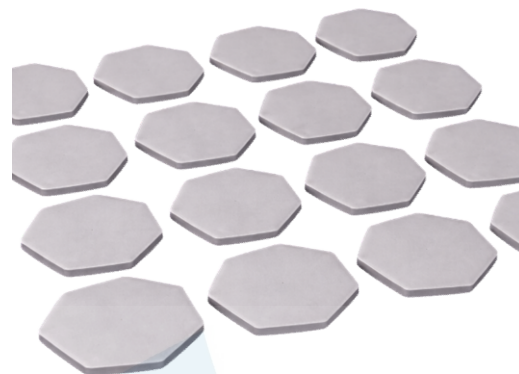
The highly tacky, putty-like surface completely displaces air from microscopic asperities, driving thermal resistance down to near-zero levels.

● Ultra-Pure Formulation:

D3~D20 Non-Detectable chemistry eliminates outgassing risks, ensuring zero contamination in highly sensitive optical and electronic environments.

● Mission-Critical Reliability:

Engineered to maintain stable physical and thermal properties over extended operational lifespans in severe environments.



PROPERTY	VK-X8S	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Grey	Visual
Density	3.2 g/cc	ASTM D792
Thickness Range	0.5mm~5.0mm	N/A
Thermal Conductivity	9.0 W/m-K	Hot Disk
Rth at 1mm,10psi	0.09 °C-in ² /W	ASTM D5470
Hardness Shore OO	15	ASTM D2240
Dielectric Constant@1MHz	8 @1MHz	ASTM D150
Dielectric Strength	>8 KVac/mm	
Volume Resistivity	10 ¹⁴ Ω-cm	ASTM D257
Temperature Range	-40°C to 150°C	VOT Test Method
Flammability Rating	V-0	UL 94
Siloxane Volatile Content (D3-D20)	Not Detected	GC-MS

Typical Applications

- Next-Gen AI & Supercomputing (High-Bandwidth Memory (HBM), ultimate GPU accelerators, and liquid-cooled server cold plates.)
- Aerospace & Defense
- Advanced Autonomous Driving
- Next-Gen Telecommunications
- High-Power EV Electronics
- Specialized Optoelectronics
- Advanced Medical Devices
- Aerospace & Avionics

Storage Conditions

- Storage Temperature: 15°C to 35°C, RH <50%
- Shelf Life: 12 months under above conditions

TW: +886-2-24511685

KS: +86-512-57456656

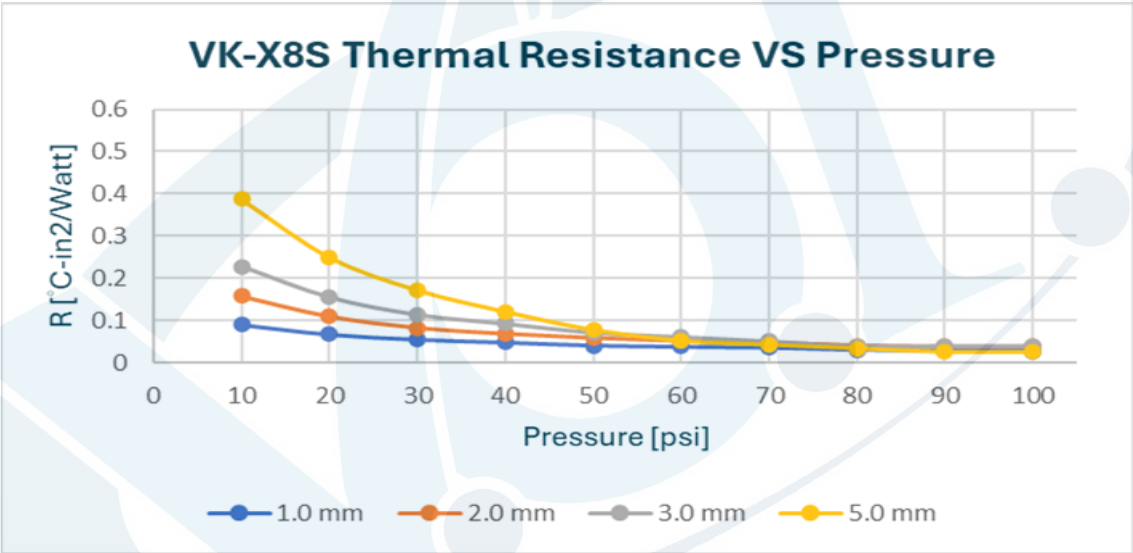
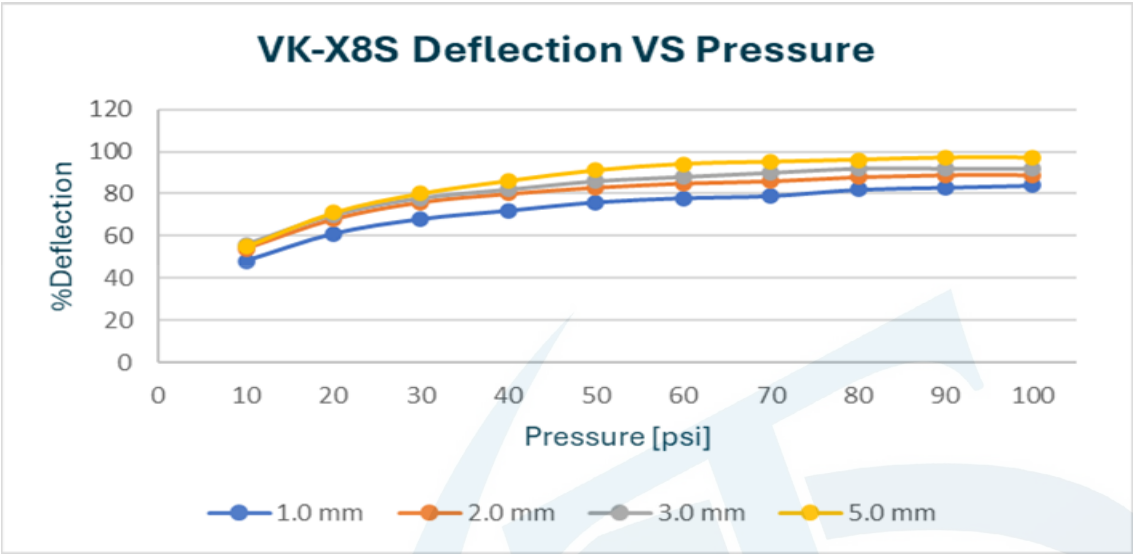
CZ: +86-519-82208589

service@VOT-thermal.com.tw

sales@VOT-thermal.com

Limited Warranty: For a period of 12 months from the date of first sale, VOT warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s).

NOTE: VOT does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product(s) or of any final product into which the product(s) may be incorporated by the purchaser and/or user. The purchaser and/or user should perform its own tests to determine the suitability and fitness of the product(s) for the particular purpose desired in any given situation.



VK-	X8S	-	XXXXXX	-	XXX
Gap filler	X-series		size		Thickness
			200200=20*20		008=0.8mm
			254254=25.4*25.4		010=1.0mm

Limited Warranty: For a period of 12 months from the date of first sale, VOT warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s).

NOTE: VOT does not assume any responsibility or liability for any advice furnished by it, or for the performance or results of any installation or use of the product(s) or of any final product into which the product(s) may be incorporated by the purchaser and/or user. The purchaser and/or user should perform its own tests to determine the suitability and fitness of the product(s) for the particular purpose desired in any given situation.