

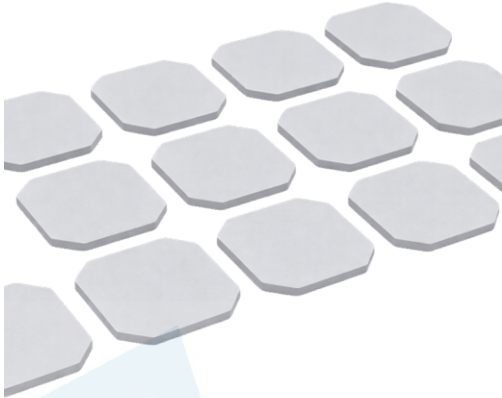
VK-X7S

Ultimate High-Performance & Ultra-Soft Thermal Pad



Product Description

VOT VK-X7S is a flagship-tier thermal interface pad engineered for the most demanding high-power applications that require extreme heat dissipation and zero-stress compression. Delivering a superior thermal conductivity of 8.0 W/m-K combined with an ultra-soft Shore OO 15 hardness, VK-X7S sets a new benchmark for high-deflection thermal solutions. The core innovation of VK-X7S lies in its Advanced Structural Matrix Technology. While ultra-high filler loading typically results in brittle or mushy materials, VK-X7S utilizes a specialized structural additive that reinforces the polymer network. This allows the material to remain incredibly compliant and putty-like for maximum surface wetting, while maintaining exceptional cohesive strength and "non-messy" handleability for high-speed assembly. Formulated as a clean, siloxane-free material (D3-D20 Non-Detectable), VK-X7S prevents contamination in sensitive environments. With its industry-leading performance-to-cost ratio, VK-X7S is the definitive premium solution for AI, automotive, and telecommunication systems that cannot compromise on thermal efficiency or mechanical safety.



FEATURES & BENEFITS

- **Extreme Thermal Efficiency:**
8.0 W/m-K conductivity provides elite-level cooling for next-generation power-dense processors.
- **Ultimate Stress Relief:**
Shore OO 15 hardness ensures the lowest possible deflection force, protecting fragile BGA components and thin PCBs from mechanical damage.
- **Superior Structural Integrity:**
Advanced matrix technology provides excellent tensile strength and handling, preventing tearing or deformation during manual or automated placement.
- **Exceptional Interfacial Wetting:**
Naturally high tack and ultra-softness allow the material to "melt" into surface irregularities, achieving near-zero contact resistance.
- **Siloxane-Free Purity:**
D3~D20 Non-Detectable formulation ensures no fogging or contamination of optical and electrical contacts.
- **Outstanding Price-to-Performance:**
Delivers high-end flagship performance with a significant cost advantage over competing 7W-8W materials.

PROPERTY	VK-X7S	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Light Grey	Visual
Density	3.4 g/cc	ASTM D792
Thickness Range	0.5mm~5.0mm	N/A
Thermal Conductivity	8.0 W/m-K	Hot Disk
Rth at 1mm,10psi	0.1 °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

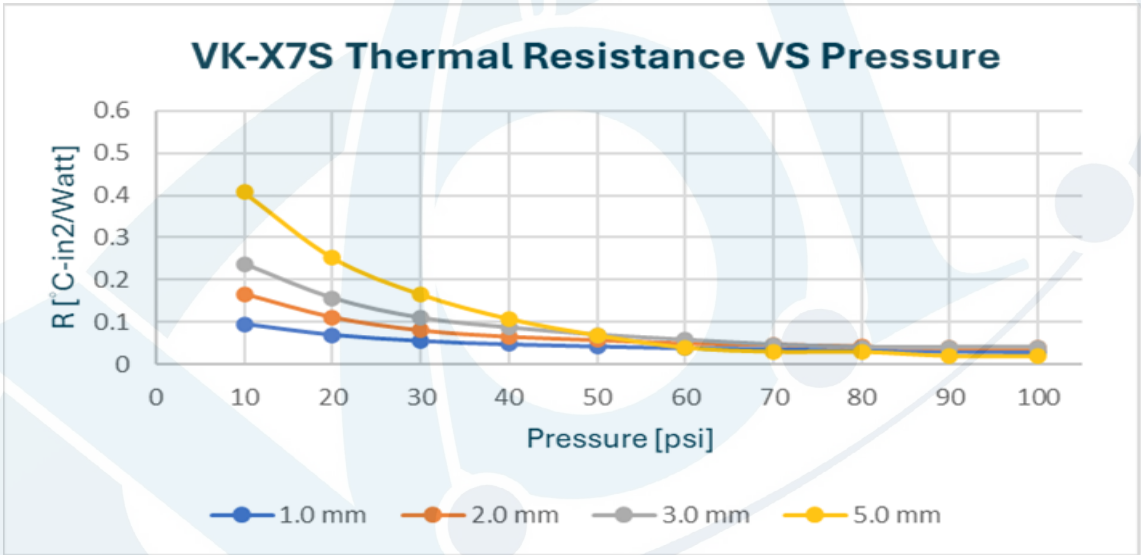
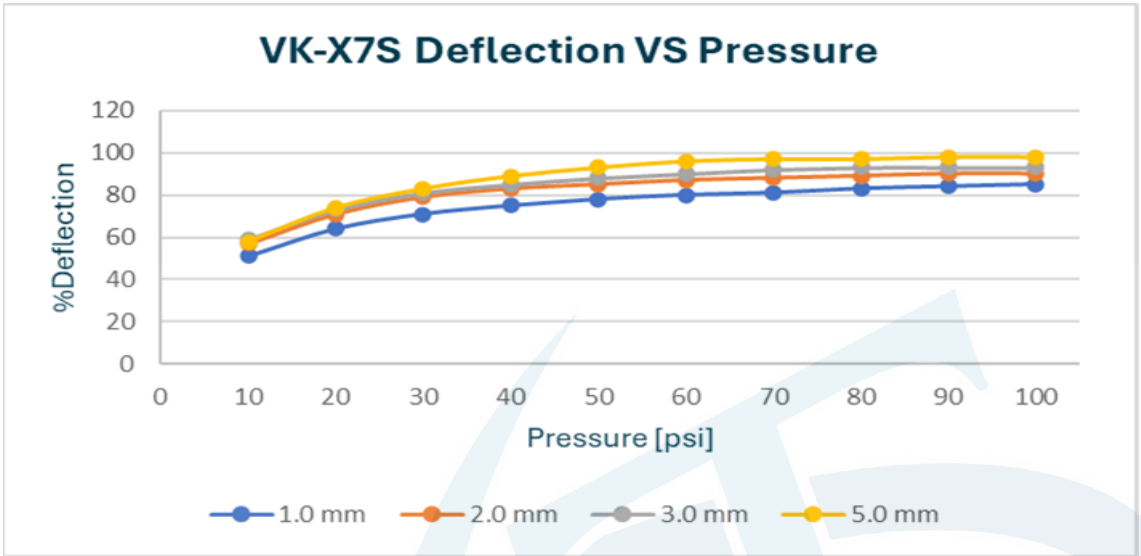
- AI & Hyperscale Computing (AI accelerators, GPU modules, and high-density server clusters.)
- Automotive ADAS & LiDAR
- 5G Telecommunications
- Next-Gen Optoelectronics
- High-End Graphics & Gaming
- Power Electronics
- Advanced Medical Devices
- Aerospace & Avionics

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-	X7S	-	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.

