

Ultra-Soft Structurally Stable Putty-Like Thermal Pad for Extreme Cooling

Product Description

VOT VK-X11S is an ultra-soft structurally stable putty-like thermal interface pad engineered for extreme thermal performance, exceptional compressibility, and advanced handling stability.

Delivering 11 W/m·K thermal conductivity with an ultra-low Shore OO 20 hardness, VK-X11S achieves a rare balance between maximum surface conformability and enhanced structural cohesion. Unlike conventional ultra-soft high-filled thermal pads that often become excessively fragile, sticky, or difficult to process, VK-X11S maintains a remarkably stable and cohesive material structure through VOT's proprietary long-chain structural matrix technology.

The controlled putty-like conformability enables outstanding surface wetting and gap-filling capability under low assembly pressure while maintaining excellent handling and die-cut processability. Operating as a D3–D20 non-detectable thermal solution, VK-X11S also minimizes siloxane migration and outgassing risks for sensitive electronic applications.

FEATURES & BENEFITS

● Ultra-Soft High-K Architecture:

Combines 11 W/m·K thermal conductivity with ultra-low Shore OO 20 hardness.

● Structurally Stable Putty-Like Design:

Maintains excellent material cohesion unlike conventional ultra-soft high-filled TIMs.

● Exceptional Compressibility:

Ultra-low hardness minimizes mechanical stress on delicate components.

● Superior Gap-Filling Capability:

Controlled putty-like conformability improves interface wetting and contact efficiency.

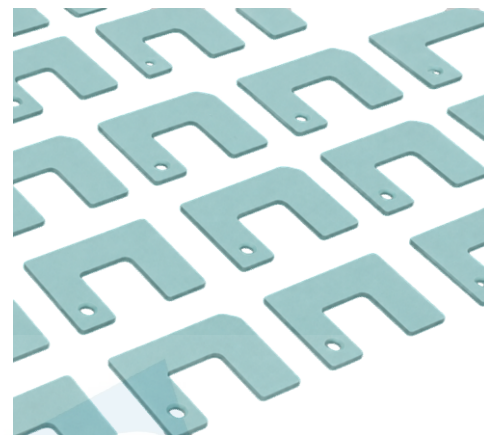
● Enhanced Processability:

Stable material structure supports cleaner die-cutting and assembly handling.

● D3–D20 Non-Detectable:

Ultra-clean formulation minimizes siloxane migration and outgassing risks.

PROPERTY	VK-X11S	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Blue	Visual
Density	3.4 g/cc	ASTM D792
Thickness Range	0.3mm~6.0mm	N/A
Thermal Conductivity	11.0 W/m·K	Hot Disk
Rth at 1mm,10psi	0.08 °C·in ² /W	ASTM D5470
Hardness Shore OO	20	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 Servers & GPU Accelerators
- High-Performance Computing Systems
- Advanced AI Packaging
- Optical Modules & Transceivers
- Networking & Telecommunications
- High-Density Power Devices
- Automotive Electronics
- Sensitive Electronic Assemblies
- Aerospace & Avionics

Storage Conditions

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

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KS: +86-512-57456656

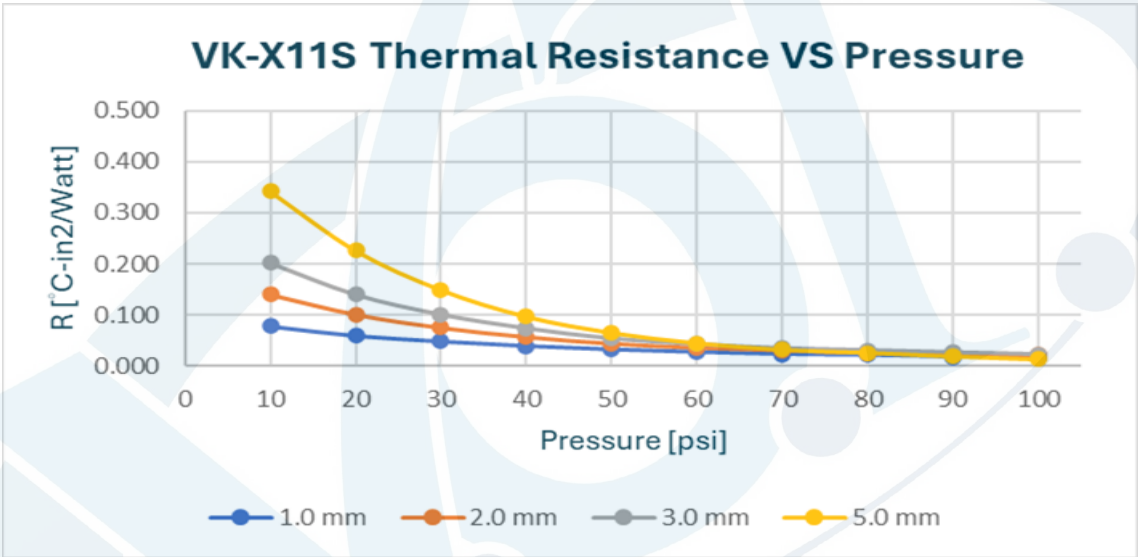
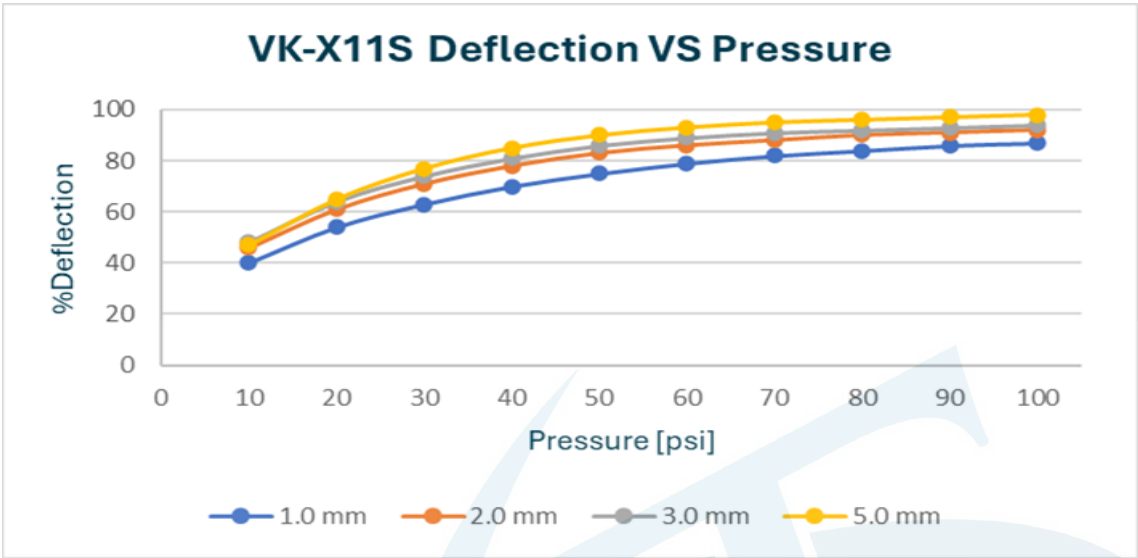
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Limited Warranty: For a period of 12 months from the date of first sale, VOT warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our 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-	X11S	-	XXXXXX	-	XXX
Gap filler	X-series		size		Thickness
			200200=20*20		008=0.8mm
			254254=25.4*25.4		010=1.0mm

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