

High-Performance Structurally Stable Putty-Like Thermal Pad for Extreme Cooling

Product Description

VOT VK-X14S is a high-performance structurally stable putty-like thermal interface pad engineered for extreme heat dissipation, excellent compressibility, and superior handling stability.

Delivering 14 W/m-K thermal conductivity with a balanced Shore OO 35 hardness, VK-X14S achieves an exceptional combination of ultra-high thermal performance, surface conformability, and structural cohesion. Unlike conventional ultra-high-filled thermal pads that often become rigid, brittle, or difficult to process, VK-X14S maintains excellent flexibility and controlled putty-like conformability through VOT's proprietary long-chain structural matrix technology.

The advanced material architecture enables outstanding gap-filling capability and interface wetting while maintaining reliable handling and assembly processability. Operating as a D3–D20 non-detectable thermal solution, VK-X14S also minimizes siloxane migration and outgassing risks for sensitive high-performance electronic applications.

FEATURES & BENEFITS

- **Ultra-High Thermal Conductivity:**

14 W/m-K thermal performance supports extreme heat dissipation requirements.

- **Structurally Stable Putty-Like Design:**

Maintains excellent material cohesion and handling stability under high filler loading.

- **Excellent Compressibility:**

Balanced Shore OO 35 hardness reduces mechanical stress on components.

- **Superior Gap-Filling Capability:**

Controlled putty-like conformability enhances interface contact efficiency.

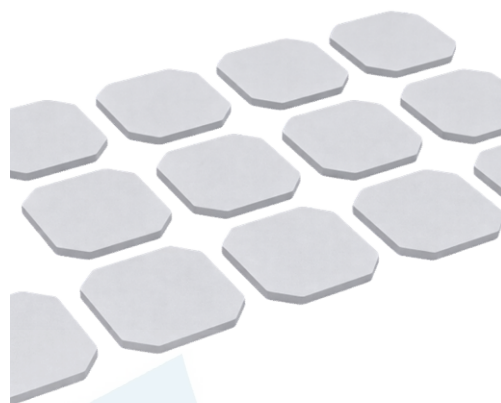
- **Enhanced Handling & Assembly Performance:**

Optimized structural integrity improves die-cutting and installation processability.

- **D3–D20 Non-Detectable:**

Ultra-clean formulation minimizes siloxane migration and outgassing risks.

PROPERTY	VK-X14S	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Grey	Visual
Density	3.4 g/cc	ASTM D792
Thickness Range	0.75mm~4.0mm	N/A
Thermal Conductivity	14.0 W/m-K	Hot Disk
Rth at 1mm,10psi	0.07 °C-in ² /W	ASTM D5470
Hardness Shore OO	35	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
- Mission-Critical 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

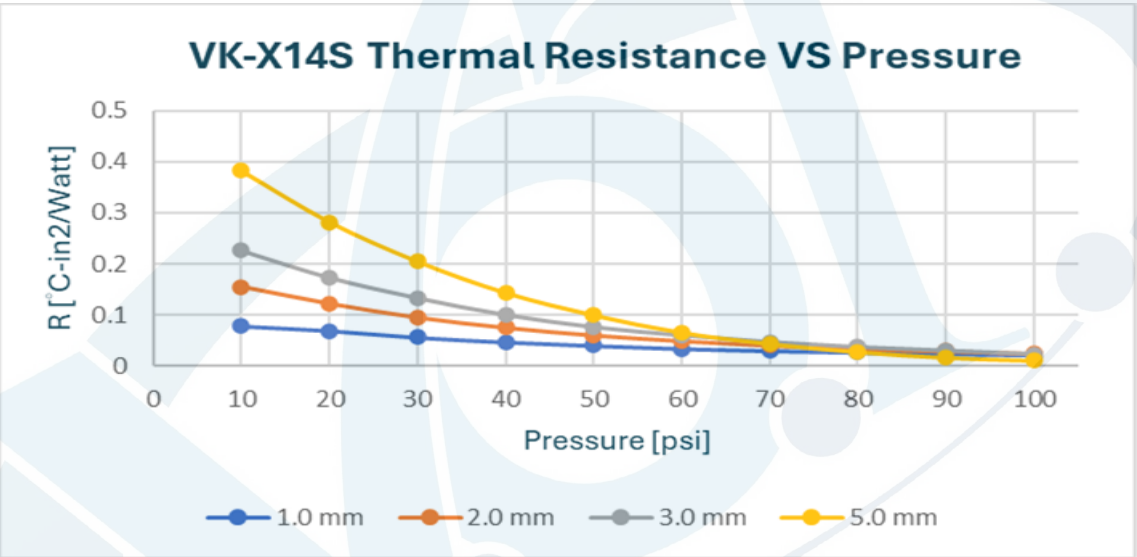
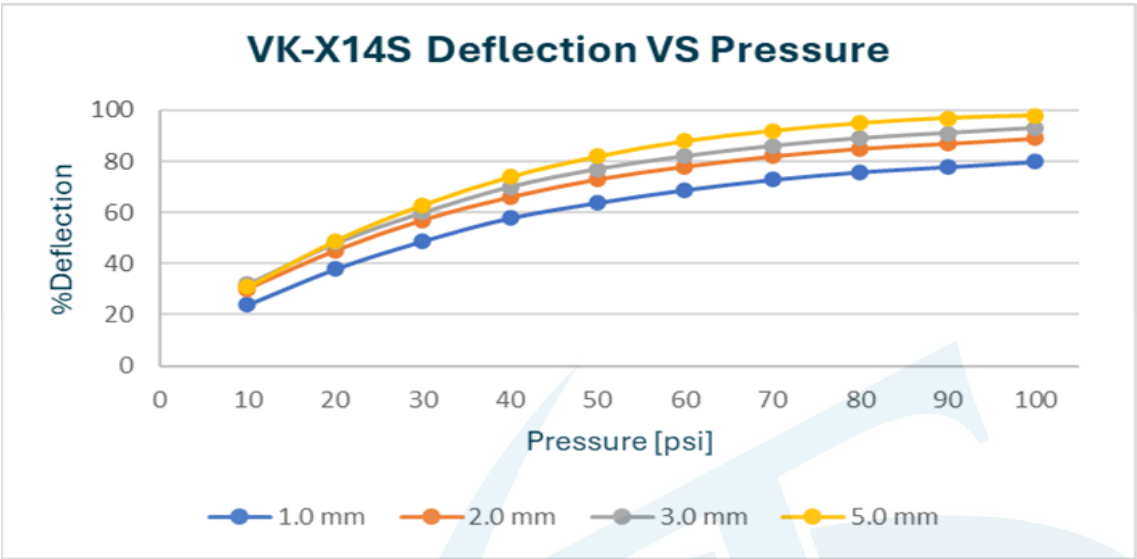
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Limited Warranty: For a period of 12 months from the date of first sale, VOT warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our 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-	X14S	-	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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