

Hybrid-Structure Thermal Pad for Low-Stress High-Performance Cooling

Product Description

VOT VK-X602 is a high-performance hybrid-structure thermal interface pad engineered to provide an optimized balance between structural stability, compressibility, and thermal performance.

Delivering 7 W/m·K thermal conductivity with a Shore OO 40 hardness, VK-X602 features a unique material architecture positioned between conventional elastic thermal pads and putty-like thermal interface materials. The highly filled thermally conductive structure provides enhanced surface conformability and lower interface stress while maintaining sufficient material integrity for reliable handling and assembly.

Unlike traditional high-hardness thermal pads that may generate excessive assembly stress, VK-X602 offers improved compressibility and reduced mechanical loading on components, making it suitable for high-density electronic applications requiring both thermal efficiency and structural stability.

VK-X602 is designed as an economical high-performance thermal solution for AI computing, networking, industrial, and general electronic thermal management applications.

FEATURES & BENEFITS

● Hybrid Structural Architecture:

Combines structural stability with enhanced compressibility and surface conformability.

● High Thermal Conductivity:

7 W/m·K thermal performance supports efficient heat dissipation applications.

● Reduced Interface Stress:

Lower mechanical loading compared to conventional high-hardness thermal pads.

● Enhanced Gap-Filling Capability:

Highly filled structure improves thermal interface contact efficiency.

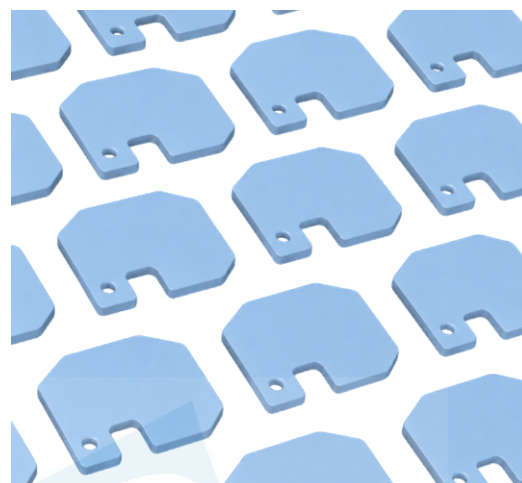
● Reliable Handling Stability:

Maintains sufficient structural integrity for assembly and die-cut processing.

● Cost-Effective Thermal Solution:

Economical design for high-performance electronic thermal management applications.

PROPERTY	VK-X602	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Light Blue	Visual
Density	3.2 g/cc	ASTM D792
Thickness Range	0.3mm~6.0mm	N/A
Thermal Conductivity	10.0 W/m-K	ASTM D5470
Thermal Conductivity	7.0 W/m-K	Hot Disk
Rth at 1mm,10psi	0.07 °C-in ² /W	ASTM D5470
Hardness Shore OO	40	ASTM D2240
Dielectric Constant@1MHz	7 @1MHz	ASTM D150
Dielectric Strength	>8 KVac/mm	
Volume Resistivity	10 ¹⁴ Ω-cm	ASTM D257
Temperature Range	-40°C to 200°C	VOT Test Method
Flammability Rating	V-0	UL 94
Siloxane Volatile Content (D3-D20)	Not Detected	GC-MS



Typical Applications

- AI Servers & Computing Systems
- Networking & Telecommunications
- Power Conversion Devices
- Industrial Electronics
- GPU / CPU Thermal Management
- Consumer Electronics
- SSD & Memory Modules
- General High-Density 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

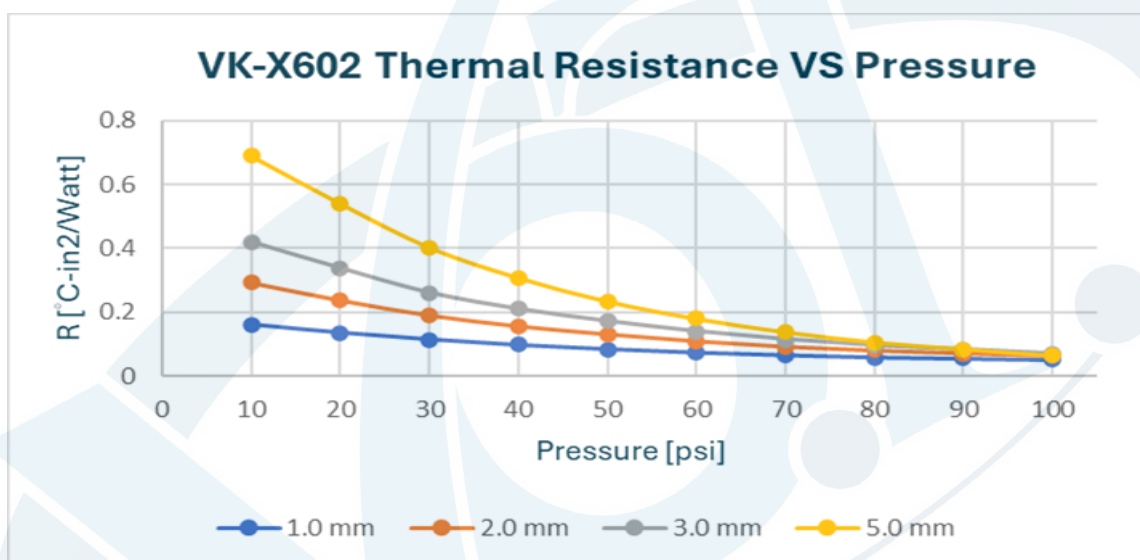
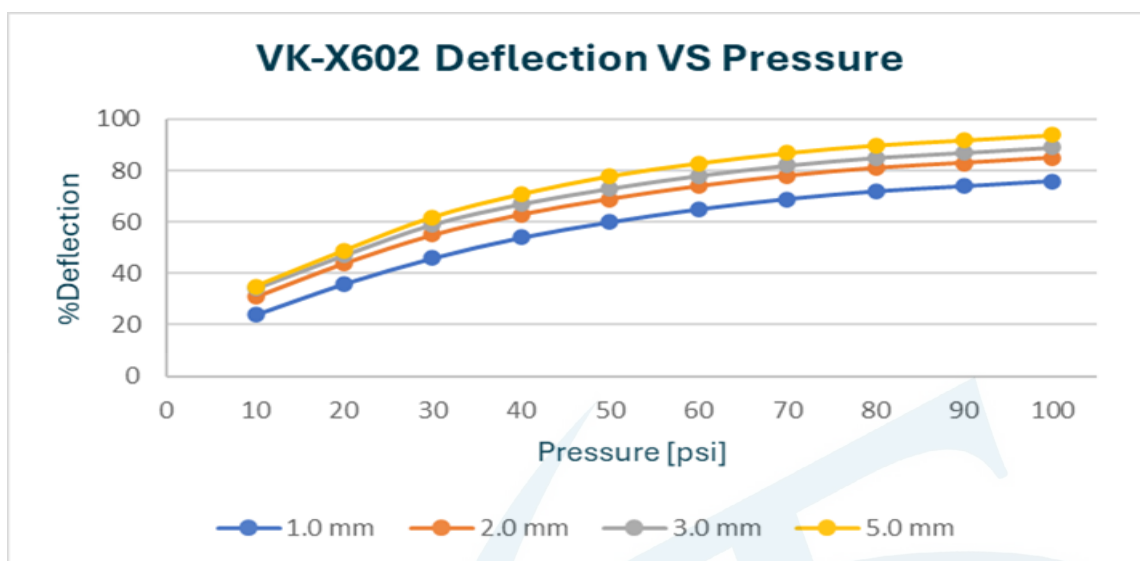
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Limited Warranty: For a period of 12 months from the date of first sale, VOT warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our 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-	X602	-	XXXXXX	-	XXX
Gap filler	1: one side tack free		size		Thickness
	3: VK-6100 on one side		200200=20*20		008=0.8mm
	4: fiberglass reinforcement		254254=25.4*25.4		010=1.0mm

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