

VK-X5US

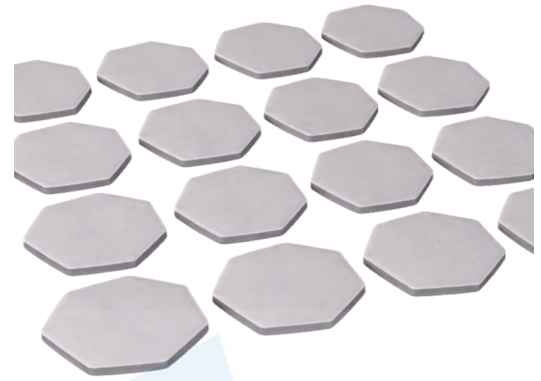
Ultra-Soft Premium Thermal Pad



Product Description

VOT VK-X5US pushes the physical boundaries of solid thermal interface materials by delivering a premium thermal conductivity of 5.0 W/m-K at an ultra-soft hardness of just Shore OO 20. Engineered to the absolute limit of elastomeric handleability, VK-X5US behaves with the extreme conformability of a thermal putty while maintaining the convenient, mess-free application of a pre-formed pad.

This "Ultra-Soft" formulation requires near-zero compression force to achieve maximum deflection, entirely eliminating mechanical stress on fragile bare-die ICs, delicate solder joints, and thin-profile PCBs. Its putty-like surface characteristics allow it to wet out perfectly across extreme topographical variations and steep component height differences, driving out interfacial air gaps for optimal heat transfer. VK-X5US is the ultimate thermal solution for high-power, highly sensitive electronics where uncompromising cooling performance and



FEATURES & BENEFITS

● Ultimate Low-Stress Performance:

Shore OO 20 hardness requires minimal deflection force, ensuring zero risk of board bending or component cracking.

● Putty-Like Conformability:

Effortlessly bridges massive gap tolerances and covers multi-chip modules with varying heights.

● Premium Heat Transfer:

5.0 W/m-K thermal conductivity ensures rapid cooling for power-dense microprocessors.

● Superior Interfacial Wetting:

Naturally highly tacky surface achieves intimate contact with microscopic surface roughness, minimizing thermal resistance.

● Vibration & Shock Damping:

The ultra-soft matrix acts as an exceptional mechanical shock absorber for automotive and aerospace environments.

● No-Mess Application:

Provides the extreme compliance of liquid dispensable gap fillers without the need for complex pumping equipment or curing time.

PROPERTY	VK-X5US	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Light Grey	Visual
Density	3.1 g/cc	ASTM D792
Thickness Range	1.0mm~4.0mm	N/A
Thermal Conductivity	5.0 W/m-K	ASTM D5470
Rth at 1mm,10psi	0.23 °C-in ² /W	ASTM D5470
Hardness Shore OO	20	ASTM D2240
Dielectric Constant@1MHz	7.4 @1MHz	ASTM D150
Dielectric Strength	>8 KVac/mm	
Volume Resistivity	10 ¹³ Ω-cm	ASTM D257
Temperature Range	-40°C to 180°C	VOT Test Method
Flammability Rating	V-0	UL 94
Siloxane Volatile Content (D3-D20)	Not Detected	GC-MS

Typical Applications

- Fragile Microelectronics
(Bare-die CPUs/GPUs, Flip-chip packages.)
- Optoelectronics & Sensors
- Automotive High-Reliability
- High-Performance Computing
- Consumer Wearables
- Fragile Displays
- Telecommunications
- Medical Equipment

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

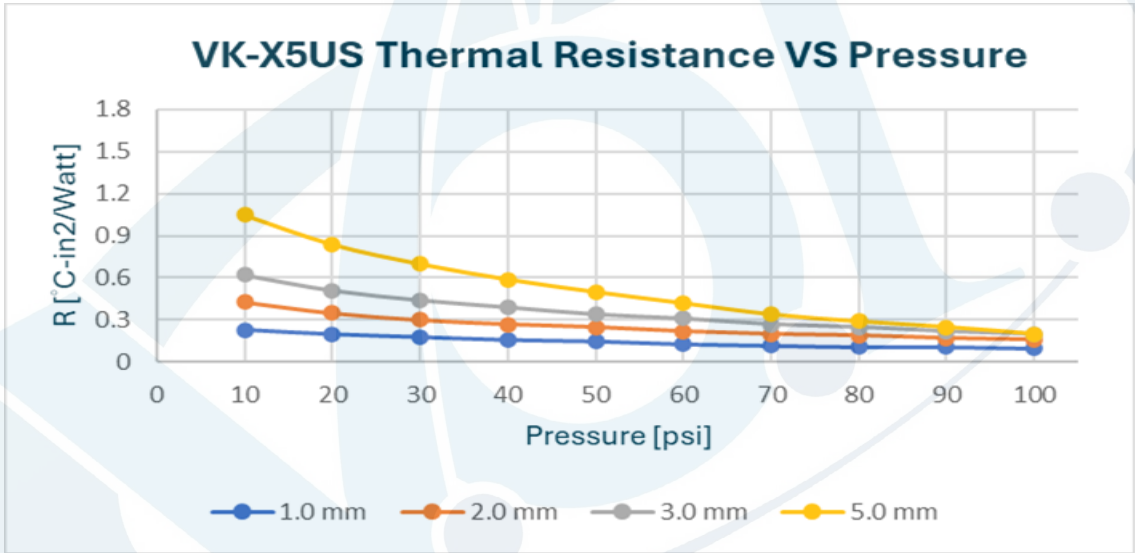
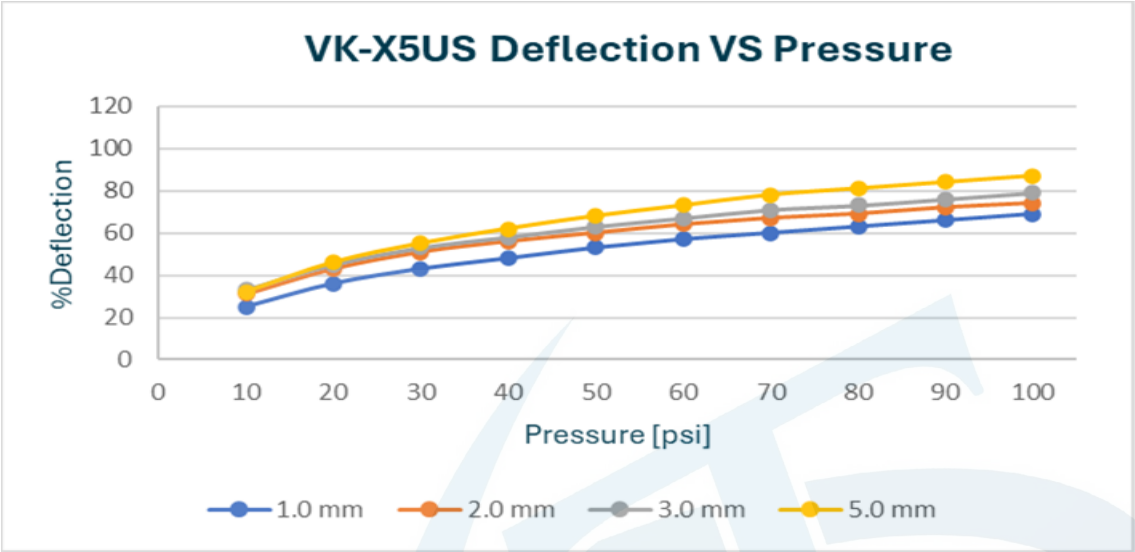
CZ: +86-519-82208589

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-	X5US	-	XXXXXX	-	XXX
Gap filler	1: one side tack free 3: VK-6100 on one side 4: fiberglass reinforcement		size 200200=20*20 254254=25.4*25.4		Thickness 008=0.8mm 010=1.0mm

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