

VK-X3L

Standard All-Rounder Thermal Pad



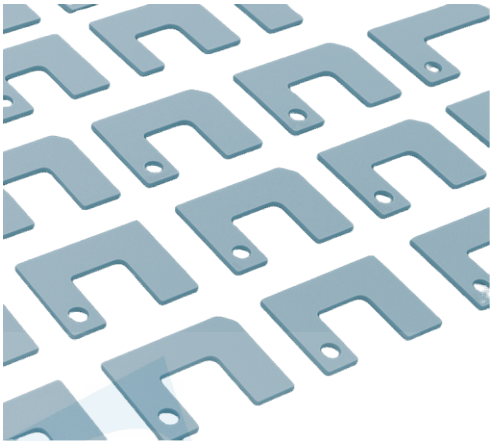
Product Description

VOT VK-X3L is a versatile, high-reliability thermal interface pad designed as the "Standard All-Rounder" for a wide array of electronic applications. Delivering a balanced thermal conductivity of 3.0 W/m-K with a moderate hardness of Shore OO 45, VK-X3L is engineered to provide consistent performance across all critical metrics, including vertical elasticity, lateral tensile strength, and surface wetting.

Unlike specialized materials that focus on a single extreme attribute, VK-X3L prioritizes holistic performance synergy. Its optimized structural integrity allows for exceptional handling and clean reworkability, while its compliant nature ensures effective gap-filling between uneven components. As the most widely applicable economic solution in the VK series, VK-X3L is the ideal "go-to" choice for high-volume manufacturing where reliable, stable, and affordable thermal management is the top priority.

FEATURES & BENEFITS

- **Synergistic Performance Profile:**
Perfectly balances thermal conductivity, compressibility, and mechanical strength for universal application.
- **Reliable 3.0 W/m-K Conductivity:**
Provides dependable heat dissipation for mid-to-high power density components.
- **Superior Handling & Reworkability:**
The Shore OO 45 formulation offers excellent structural stability, preventing tearing or deformation during high-speed manual or automated assembly.
- **Consistent Surface Wetting:**
Ensures low interfacial thermal resistance by effectively conforming to microscopic surface irregularities.
- **High Elastic Recovery:**
Maintains stable contact pressure over the product's lifespan, even under environmental stress.
- **Ultimate Cost-Efficiency:**
Optimized as the primary economic choice for mass-market electronic cooling designs.



PROPERTY	VK-X3L	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	Light Blue	Visual
Density	3.0 g/cc	ASTM D792
Thickness Range	0.3mm~12.0mm	N/A
Thermal Conductivity	3.0 W/m-K	ASTM D5470
Rth at 1mm,10psi	0.46 °C-in ² /W	ASTM D5470
Hardness Shore OO	45	ASTM D2240
Dielectric Constant@1MHz	7.2 @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

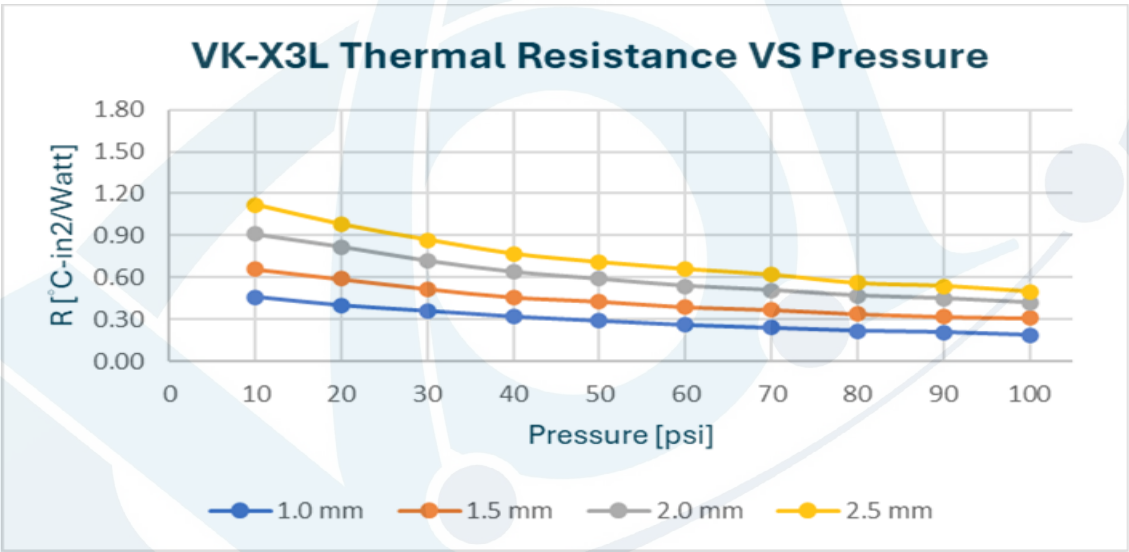
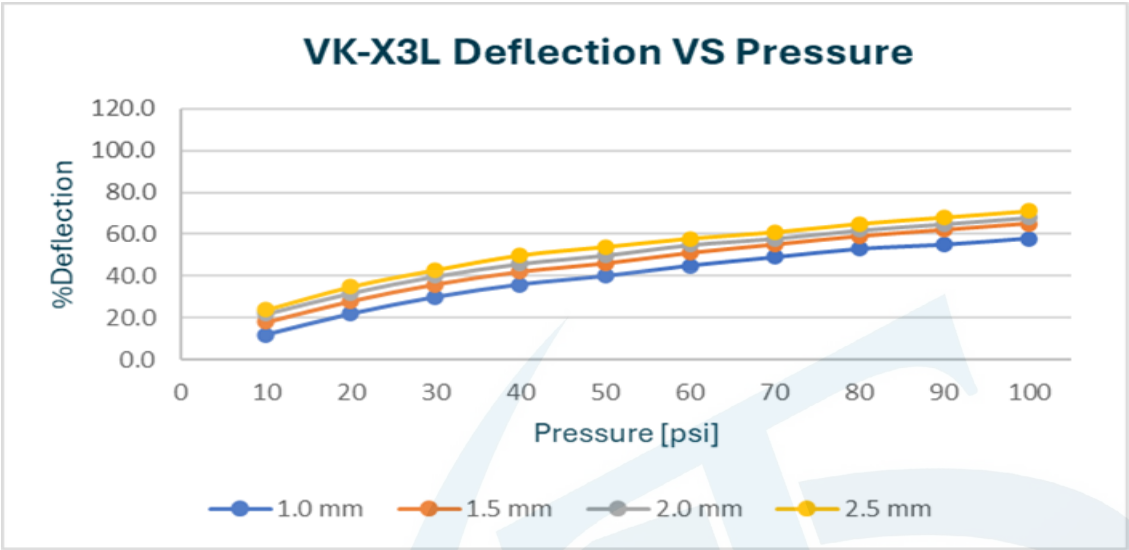
- General Consumer Electronics (Smart TVs, Set-Top Boxes, Audio/Video Equipment)
- Power Supplies, Adapters, and Converters
- Automotive electronics
- Telecommunication & Networking Devices (Routers, Switches, Modems)
- LED Lighting Modules and Driver Ics
- Mass Storage Devices and Memory Modules
- Automotive Infotainment Systems & General ECUs

Storage Conditions

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

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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-	X3L	-	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

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).

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