

VK-A6US

Cost-Effective Ultra-Soft Thermal Pad



Product Description

VOT VK-A6US is a highly compliant, budget-friendly thermal interface pad engineered for high-volume applications that demand ultra-low mechanical stress. Combining a baseline thermal conductivity of 1.5 W/m-K with an extremely soft Shore OO 20 hardness, this material provides exceptional gap-filling capabilities without imposing the premium costs typically associated with ultra-soft thermal solutions.

The putty-like conformability of VK-A6US allows it to seamlessly absorb massive structural tolerances, warped surfaces, and steep component height differences commonly encountered in cost-sensitive manufacturing. It requires near-zero compression force, entirely eliminating the risk of board distortion or damage to fragile components during assembly. VK-A6US is the optimal choice for cost-driven projects that require dependable basic thermal management alongside absolute physical protection.

FEATURES & BENEFITS

● Budget-Friendly Conformability:

Delivers premium ultra-low stress characteristics at an entry-level price point, strictly controlling BOM costs.

● Extreme Low Hardness:

Shore OO 20 formulation ensures near-zero deflection force, protecting fragile solder joints and thin-profile PCBs.

● Massive Tolerance Absorption:

Effortlessly bridges large, variable air gaps and uneven topographies typical in economical structural designs.

● Reliable Basic Heat Transfer:

1.5 W/m-K conductivity provides adequate and stable cooling for low-to-moderate power electronics.

● Vibration Isolation:

The ultra-soft polymer matrix acts as an effective mechanical shock absorber for daily consumer devices.

● Customizable Reinforcement:

Highly recommended to be supplied with fiberglass (FG) or PET film reinforcement to ensure dimensional stability and ease of handling on the production line.



PROPERTY	VK-A6US	TEST METHOD
Construction	Ceramic Filled Silicone sheet	N/A
Color	White	Visual
Density	2.4 g/cc	ASTM D792
Thickness Range	0.5mm~10.0mm	N/A
Thermal Conductivity	1.5 W/m-K	ASTM D5470
Rth at 1mm,10psi	0.71 °C-in ² /W	ASTM D5470
Hardness Shore OO	20	ASTM D2240
Dielectric Constant@1MHz	5.8 @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

Typical Applications

- Budget Consumer Electronics: (Smart home sensors, entry-level set-top boxes, and audio devices.)
- High-Tolerance Assemblies
- Low-Power Fragile Ics
- Cost-Sensitive Displays
- Basic LED Lighting
- Entry-Level Automotive
- Network & Telecom
- Portable Devices

Storage Conditions

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

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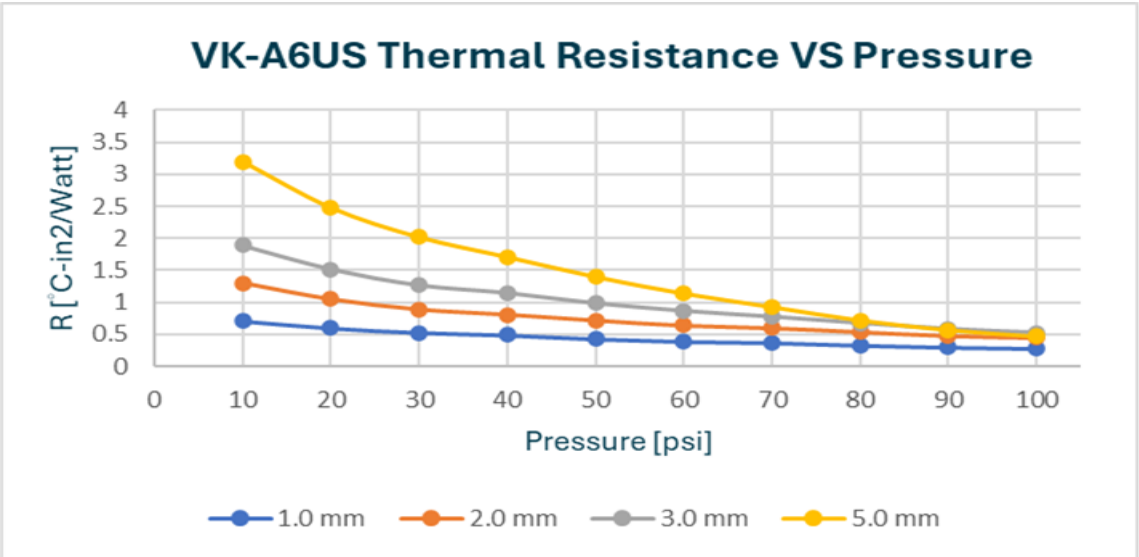
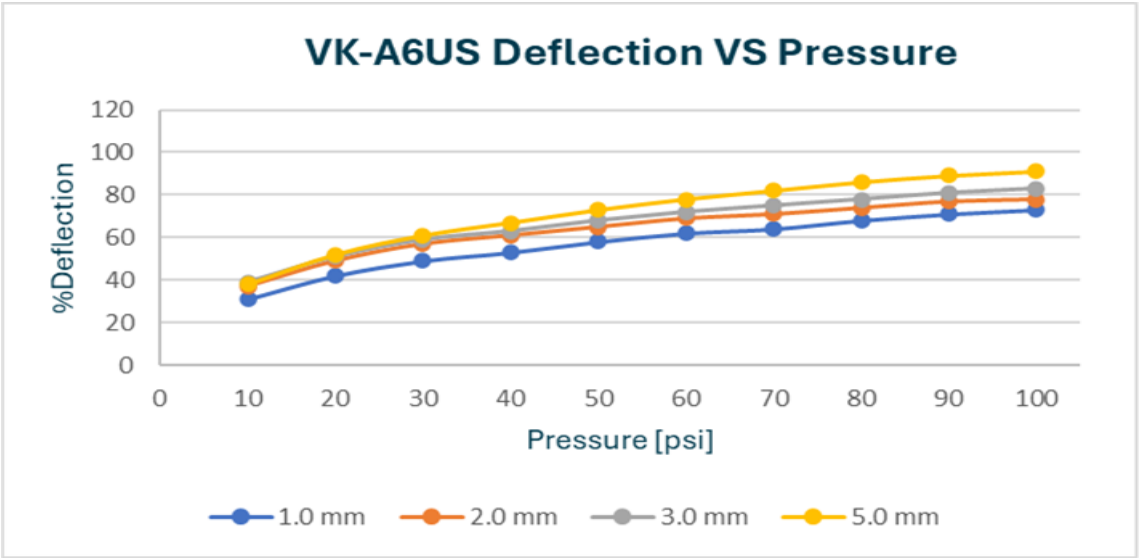
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Limited Warranty: For a period of 12 months from the date of first sale, VOT warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our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

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VK-	A6US	-	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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