

VK-XR760

High-Flow, Ultra-Low Stress Thermal Gel



Product Description

VOT VK-XR760 is a high-performance, dispensable thermal interface material engineered to bridge the gap between extreme thermal requirements and mass production efficiency. Delivering a thermal conductivity of 7.6 W/m-K, this pre-cured gel offers superior heat dissipation for power-dense electronics while maintaining an optimized dispensing rate of 20 g/min.

Unlike traditional high-conductivity materials that are often dry and difficult to dispense, VK-XR760 features a highly conforming structure that wets out surfaces effortlessly under low pressure. It utilizes VOT's "Triple-Lock" technology to ensure D3–D20 siloxanes are non-detectable, eliminating contamination risks in sensitive optical and automotive applications. VK-XR760 is the ideal "Process-Ready" solution for manufacturers demanding both flagship-level cooling performance and high-speed automated assembly.



PROPERTY	VK-XR760	TEST METHOD
Construction	Filled Silicone Dispensable	N/A
Color	Grey	Visual
Density	3.3 g/cc	ASTM D792
Flow Rate,30cc Syringe	> 20g/min	90 psi, no tip
Bulk Thermal Conductivity	7.6 W/m-K	ASTM D5470
Thermal Resistance		
10 psi & 60°C	0.25 °C-cm ² /W	ASTM D5470
50 psi & 60°C	0.18 °C-cm ² /W	
Constant gap of 0.1mm	0.24 °C-cm ² /W	
Constant gap of 1.0mm	1.4 °C-cm ² /W	
Operating Temperature Range	-40°C to 150°C	VOT Test Method
Minimun BLT	~80um	VOT Test Method
Dielectric Constant	8 @1MHz	ASTM D150
Volume Resistivity	10 ¹³ Ω-cm	ASTM D257
Flammability Rating	V-0	UL 94

Typical Applications

- Optical Transceivers & Fiber Optic Modules
- Automotive ADAS Sensors
- 5G Telecommunication Units (RRU / AAU)
- Network Switches & Routers (High-Power ASICs)
- Automotive Electronic Control Units (ECUs)
- Industrial Motor Controls & Power Supplies
- Multi-Chip Modules with Variable Gap Tolerances & Height Differences
- Handheld Devices, Tablets & Gaming Consoles

Storage Conditions

- Storage Temperature: 15°C to 35°C, RH <50%
- Shelf Life:6 months under above conditions

Availability

- Cans
- Pails
- Syringes

Features & Benefits

- **High Thermal Conductivity:** 7.6 W/m-K ensures rapid heat transfer for critical power components.
- **Optimized Dispensability:** High flow rate (20 g/min) enables faster cycle times in automated lines.
- **Siloxane-Free Purity:** D3–D20 not detected; safe for optical and electrical contact applications.
- **Superior Wet-Out:** Excellent surface conformity minimizes contact resistance (Rth).
- **Long-Term Reliability:** Resists pump-out and vertical slumping under thermal cycling.
- **Pre-Cured Convenience:** 1-part reworkable system; no mixing or curing needed.
- **Low Stress:** Soft consistency allows for stress-free assembly on delicate PCBs.

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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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