

Product Description

VOT SF-M is a high-performance non-silicone thermal interface pad engineered for applications requiring excellent thermal conductivity, mechanical compliance, and siloxane-free reliability.

Unlike conventional silicone-based thermal pads, the SF-M series eliminates the risk of low molecular siloxane contamination, making it particularly suitable for sensitive electronic and optical systems where silicone migration or outgassing may lead to contact failure, signal instability, or long-term reliability concerns.

With thermal conductivity up to 10 W/m-K and a soft Shore OO 45 hardness, SF-M provides an excellent balance of thermal performance, compressibility, and structural flexibility that is rarely achievable in conventional non-silicone thermal materials.

The SF-series is designed for advanced thermal management applications including AI servers, networking equipment, optical modules, automotive electronics, industrial systems, and other high-density electronic devices requiring clean and reliable thermal interfaces.

FEATURES & BENEFITS

● Advanced Non-Silicone Architecture:

Eliminates siloxane migration and outgassing risks in sensitive electronic systems.

● High Thermal Performance:

10 W/m-K thermal conductivity enables efficient heat dissipation for high-power devices.

● Exceptional Mechanical Compliance:

Soft Shore OO 45 formulation delivers excellent compressibility with reduced assembly stress.

● Superior Gap-Filling Capability:

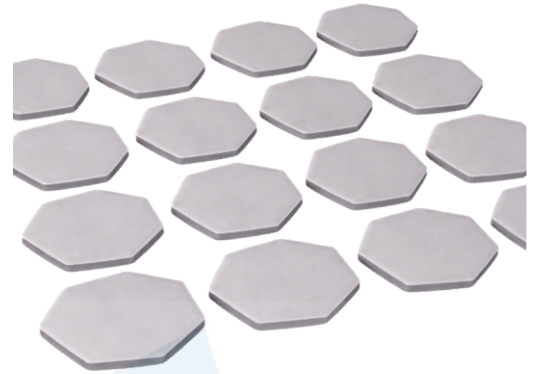
Highly conformable structure improves surface contact across uneven interfaces.

● Enhanced Structural Flexibility:

Maintains softness and flexibility unlike conventional rigid non-silicone thermal pads.

● Long-Term Reliability:

Engineered for stable thermal and mechanical performance during extended operation.



PROPERTY	SF-M	TEST METHOD
Construction	Ceramic Filled polyolefin elastomer	N/A
Color	Grey	Visual
Density	3.2 g/cc	ASTM D792
Thickness Range	0.5mm~5.0mm	N/A
Thermal Conductivity	10.0 W/m-K	Hot Disk
Rth at 1mm,10psi	0.09 °C-in ² /W	ASTM D5470
Hardness Shore OO	45	ASTM D2240
Dielectric Constant@1MHz	8 @1MHz	ASTM D150
Dielectric Strength	>8 KVac/mm	
Volume Resistivity	10 ¹⁴ Ω-cm	ASTM D257
Temperature Range	-40°C to 150°C	VOT Test Method
Flammability Rating	V-0	UL 94

Typical Applications

- AI Accelerators & Advanced Computing
- Clean Thermal Interface Applications
- High-Speed Networking Equipment
- 800G / 1.6T Optical Modules
- Automotive Camera & Sensor Modules
- Precision Industrial Electronics
- Advanced Power Conversion Systems
- High-Density Electronic Assemblies

Storage Conditions

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

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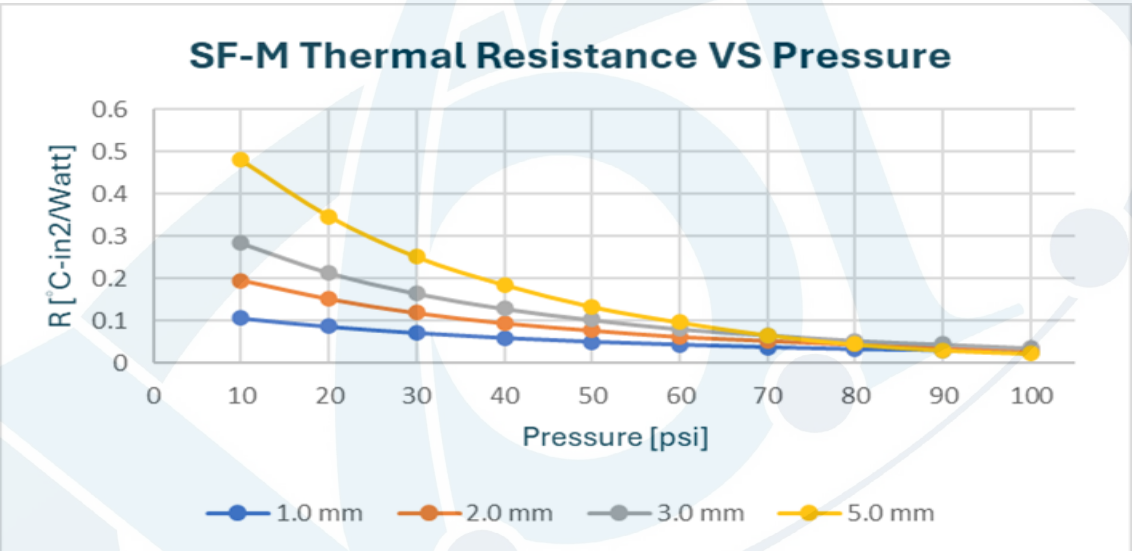
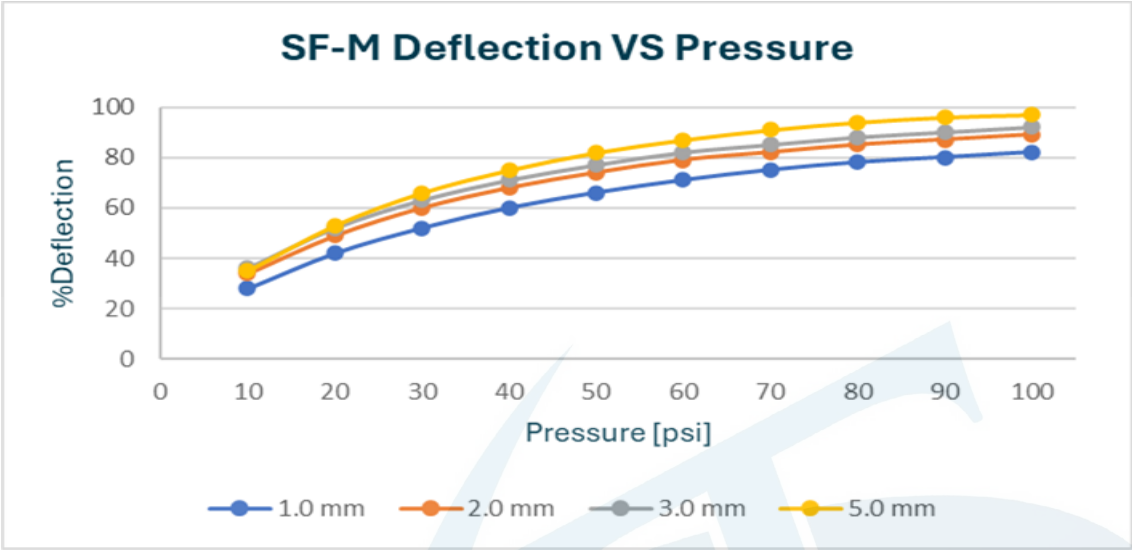
<https://vot-thermal.com/>

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.

SF-M

High-Performance Non-Silicone Thermal Pad



SF-	M	-	XXXXXX	-	XXX
non-silicone	10W/m.K		size		Thickness
			200200=20*20		005=0.5mm
			254254=25.4*25.4		010=1.0mm

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