Omni-SHIELD Max: OS7000 High Temperature High Performance Conductive Foam

Product Introduction

OS7000 is the max version of Nystein Omni-Shield family. It is an X-Y-Z axis conductive foam that designed for indoor higher temperature applications. The unique and uniform integration of electrically conductive silver-plated fibers into a low-density silicone foam, providing a high-performance EMI shielding solution. It offers greater EMI shielding performance with an ultimate short grounding path.

OS7000 also offers exceptional physical and mechanical properties as high performance base foam was used. The uniform integration of conductive fibers within the silicone foam matrix means that OS7000 is electrically stable over many compression cycles while showing a lower compression set of <5%.

OS7000 is a UL 94 V-0 rated, halogen free material, provided optional choice of an electrically conductive acrylic pressure sensitive adhesive, and is available in cut sheets, bulk rolls or custom die cut shapes. .

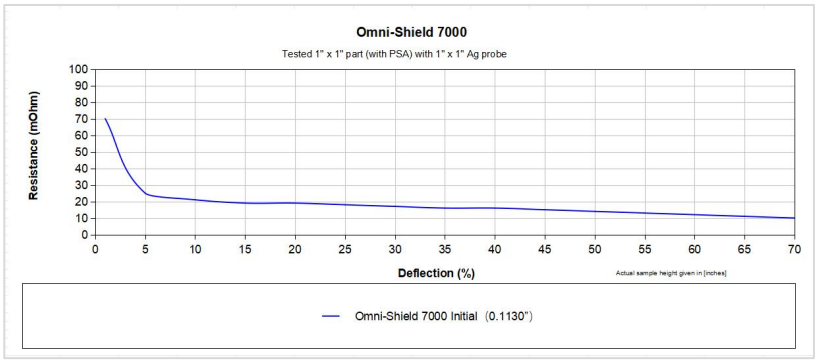
Features and Benefits

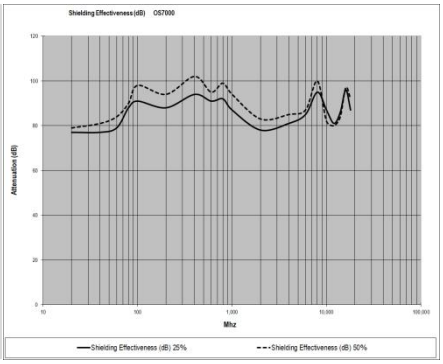
- 100dB shielding effectiveness from 20MHz to 10GHz
- Excellent Z-axis conductivity, <50mohms @25% compression
- Excellent mechanical properties, compression set <5%
- Z-axis conductivity offers good compartmental shielding
- UL94V0 flammability rated
- Optional conductive PSA
- Low conversion cost, high-speed die-cut compatible
- RoHs, REACH & Halogen Free



Typical Properties

Typical Properties	OS7000	Test Method
Compression Load (lb/in)	<1	ASTM C165
Compression Set	5%	ASTM D3574
Working Temperature (°C)	-40~125	...
Shielding Effectiveness	100dB	NYS-SE01
Through Resistance	<50mohm	1"X1" sample
FR Rate	UL94 V-0	
Bulk Form	Roll	
Conductive Path	X-Y-Z	
Conductive Element	Ag	
PSA Peel Strength (oz/inch)	150	ASTM D1000





Typical Applications

- Telecom Infrastructure rack and enclosure
- Servers and desktop laptop PCs
- LCD/LED displays
- I/0 panels, backplanes, connectors, access panelsls

Product Configuration

- Available thickness options: 1mm / 2mm / 3mm / 4mm / 5mm
- Available in sheets, rolls, and custom die-cut shapes upon customer request.
- Optional adhesive backing: conductive adhesive, thermal adhesive, or pressure-sensitive adhesive (PSA).

Storage Conditions

- Packaged in carrier tape; store at room temperature in a sealed, light-protected, and dry place.
- Optimal storage conditions: 23±2℃, 65±5%RH (store in the original packaging), with a shelf life of 18 months.
- Materials removed after opening may become contaminated during use. Do not mix contaminated products with unopened ones. Our company is not liable for contaminated products or storage conditions beyond the required specifications.
- For additional information, please contact your dedicated sales representative, technical support, or customer service personnel in a timely manner.

Cautions：
The information provided in the Technical Data Sheet (TDS) (including product use and application recommendations) is based on our knowledge and experience of Kleber products. The data contained in this TDS is for reference only and is considered reliable. We cannot be held responsible for the results of others as a result of methods beyond our control. This product can have a variety of different applications and different working conditions in your environment, which is beyond our control. Therefore, Kleber assumes no responsibility for whether the product is suitable for your production process and conditions as well as the expected applications and results. We strongly recommend that you test the product before use to confirm the applicability of the product.

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