

51H EMI Gaskets Fabric-over-Foam

UL 94V0 RATED NI/CU POLYESTER TAFFETA FABRIC-OVER-FOAM

Laird Technologies' Fabric-over-foam (FoF) 51H EMI gaskets provide excellent EMI shielding performance for customers where EMI issues occur. The 51H series EMI gaskets are composed of electrically conductive fabric wrapped around a soft urethane foam core. They are supplied with either a conductive or non-conductive pressure sensitive adhesive (PSA), and can be equipped with an Extended Release Liner (ERL) on the adhesive. The 51H is a halogen-free, UL 94V0 rated product that can be created with cross-section profiles such as rectangle, D, C, P, T, knife, bell shapes, and others. The 51H EMI gaskets can be further customized to an application by die-cutting, hole punching, notching, etc.

FEATURES

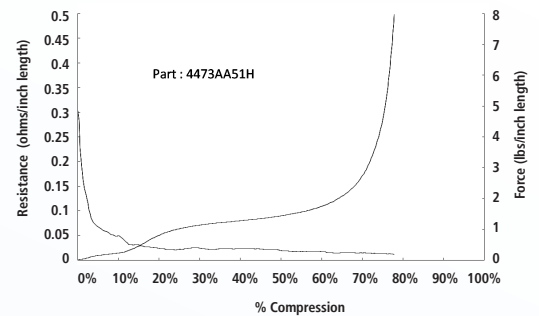
- Fabric-over-Foam gaskets are RoHS compliant
- Halogen-free per IEC-61249-2-21 standard
- UL 94V0
- Low surface resistivity of $< 0.07 \Omega/\square$ provides excellent conductivity
- Shielding effectiveness of >100 dB across a wide spectrum of frequencies
- Extremely low compression forces allow for use of lighter materials
- Fabric is highly conductive to provide good EMI shielding and grounding
- Abrasion resistant metallized fabrics show virtually no degradation in electrical performance after 1,000,000 cycles
- Laird Technologies' proprietary coating prevents fabric fraying and fingerprinting
- Available with conductive or non-conductive PSA
- Many cross-section profiles available such as rectangle, D, C, P, T, knife, bell and more
- Profile gaskets can be cut to specified lengths, kiss-cut on release liner, or mitered to form frame configurations

MARKETS

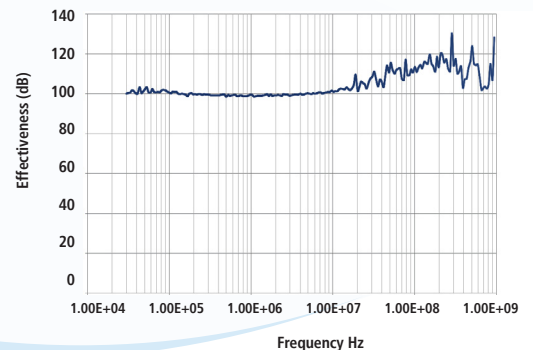
- Cabinet applications
- LCD and Plasma TV
- Medical equipment
- Servers
- Printers
- Laptop computers
- Networking equipment
- Desktop computers
- Telecommunications cabinets



FORCE/DISPLACEMENT/RESISTANCE (FDR)



SHIELDING EFFECTIVENESS (dB)



global solutions: local support™

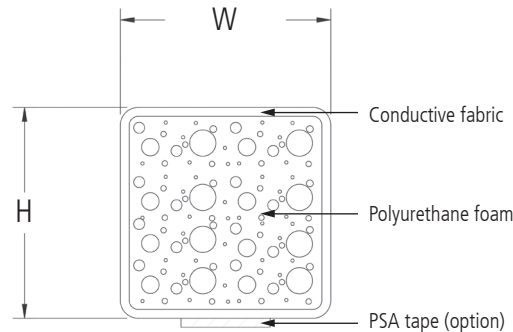
USA: +1.866.928.8181

Europe: +49.0.8031.2460.0

Asia: +86.755.2714.1166

| Item | Unit | Value | Test Method |
|-------------------------|--|----------|--------------------|
| Shielding Effectiveness | | | |
| at 100 MHz | | 108 | SAE-ARP-1705(Mod.) |
| at 1 GHz | dB | 110 | (W10 mm x H8 mm) |
| Surface Resistivity | Ω/\square | < 0.07 | ASTM F390 |
| Compression Set | % | < 20 | ASTM D3574 |
| Operation Temperature | °C | -40 ~ 70 | - |
| Flame Retardant | UL 94V0 (UL file No.E170327) | | |
| Hazardous Substance | Compliant with RoHS (Directive 2011/65/EU) | | |
| | Compliant with SONY ss-00259 | | |
| | Halogen-free (based on IEC-61249-2-21) | | |
| | Antimony-free | | |
| Shelf Life | 12 months at 23°C/ 60% R.H. | | |

COMPOSITION OF PRODUCT



PRESSURE SENSITIVE ADHESIVE (PSA TAPE) OPTIONS

| Name | Type | Thickness (mm) | Peel strength on stainless steel (JIS Z 0237) | Z-axis Resistance |
|--------|----------------|----------------|---|-------------------|
| LT-301 | Conductive PSA | 0.09 | > 1.3 kgf/25 mm | < 0.05 Ω |
| LT-350 | PSA | 0.12 | > 2 kgf/25 mm | - |

*Other PSA can be provided. Contact Laird Technologies engineering.

ORDERING INFORMATION

PART NUMBER EXAMPLE

| | | | | | | | | | | | | | | | | |
|---------|-------------------------|---|---|---|---|---|---|--------------|---|----|----|-------------|----|----|---|---|
| Digits: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | |
| | 4 | 2 | 1 | 6 | A | A | - | 5 | 1 | H | - | 0 | 1 | 4 | 0 | 0 |
| | Profile Shape & Details | | | | | | | Product Name | | | | Part Length | | | | |

EMI-DS-FOF-51H 0712

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Mouser Electronics

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