



### UL 94V0 RATED NI/CU NYLON RIPSTOP (NRS) FABRIC-OVER-FOAM

Laird Technologies' Fabric-over-Foam (FoF) 51K EMI gaskets provide excellent EMI shielding performance for customers where EMI issues occur. The 51K 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 51K is a 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 51K EMI gaskets can be further customized to an application by die-cutting, hole punching, notching, etc.

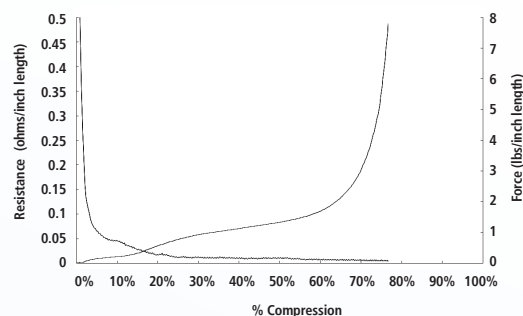
#### FEATURES

- Fabric-over-Foam gaskets are RoHS compliant
- 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

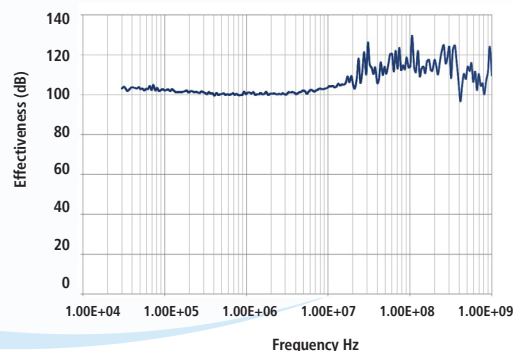
#### MARKETS

- 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)



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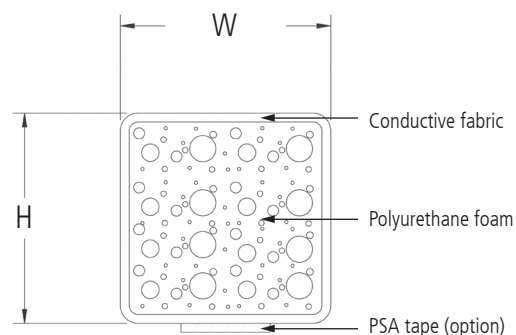
Europe: +49.0.8031.2460.0

Asia: +86.755.2714.1166

| Item                    | Unit                                       | Value     | Test Method         |
|-------------------------|--------------------------------------------|-----------|---------------------|
| Shielding Effectiveness |                                            |           | SAE-ARP-1705(Mod.)* |
| at 100 MHz              |                                            | 109       |                     |
| at 1 GHz                | dB                                         | 113       |                     |
| Surface Resistivity     | $\Omega / \square$                         | < 0.07    | ASTM F390           |
| Compression Set         | %                                          | < 20      | ASTM D3574          |
| Operation Temperature   | °C                                         | -40 to 70 | -                   |
| Flame Retardant         | UL 94V0 (UL file No.E170327)               |           |                     |
| Hazardous Substance     | Compliant with RoHS (Directive 2002/95/EC) |           |                     |
|                         | Compliant with SONY SS-00259               |           |                     |
|                         | Antimony-free                              |           |                     |
| Shelf Life              | 12 months at 23°C/ 60% R.H.                |           |                     |

\* Part tested: 8 mm H x 10 mm W, rectangle shape

## COMPOSITION OF PRODUCT



## PRESSURE SENSITIVE ADHESIVE (PSA TAPE) OPTIONS

| Name   | Type           | Thickness (mm) | Peel strength on stainless steel<br>(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 K - 0 1 4 0 0

Profile Shape & Details Product Name Part Length  
(inches to two decimal points)

EMI-DS-FOF-51K 0712

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