



### 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.

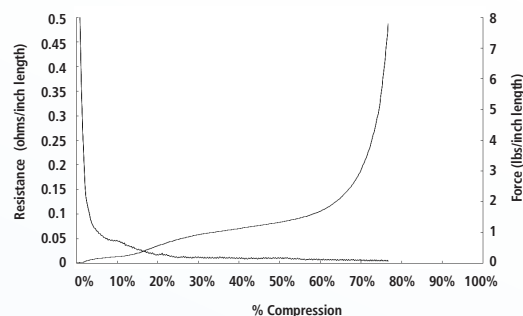
#### FEATURES

- 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

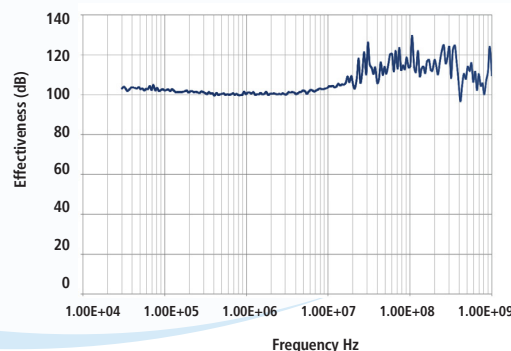
#### MARKETS

- 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)



global solutions: local support™

USA: +1.866.928.8181

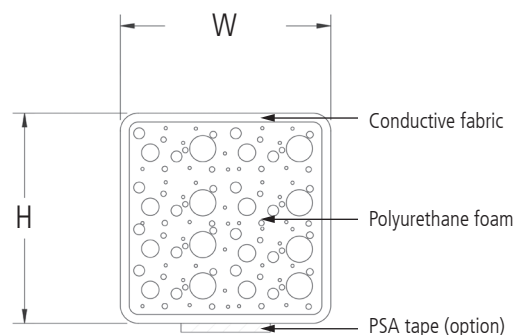
Europe: +49.0.8031.2460.0

Asia: +86.755.2714.1166

Item	Unit	Value	Test Method
Shielding Effectiveness			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 (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

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user. Laird Technologies makes no warranties as to the fitness, merchantability, suitability or non-infringement of any Laird Technologies materials or products for any particular general use. Laird Technologies shall not be liable for any mental or consequential damages, including lost profits, arising from the use of any Laird Technologies products. Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2012 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trade marks or registered trade marks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Laird Performance Materials:](#)

[4212-AB-51K-02400](#) [4071AB51K00900](#) [4051AB51K03600](#) [4211AB51K09600](#) [4694AB51K04800](#) [4787AB51K01800](#)  
[4268AB51K00300](#) [4789AC51K08400](#) [4532AB51K05600](#) [4788AB51K06600](#) [4053AB51K01800](#) [4200AB51K01800](#)  
[4286AB51K09600](#) [4240AB51K07200](#) [4684AB51K02000](#) [4522AB51K07900](#) [4358AB51K00200](#) [4105AB51K07900](#)  
[4240AB51K04800](#) [4358AB51K01800](#) [4233EA51K01723](#) [4181AB51K03600](#) [4164FW51K00165](#) [4694AB51K01713](#)  
[4609AB51K07900](#) [4081EH51K06300](#) [4184AB51K01258](#)