

# 51K EMI Gaskets

# Fabric-over-Foam

Innovative **Technology** for a **Connected** World



## **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.

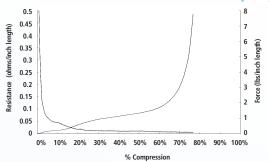
### FEATURES **ROHS**

- Fabric-over-Foam gaskets are RoHS compliant
- UL 94V0
- Low surface resistivity of < 0.07 Ω/□ 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

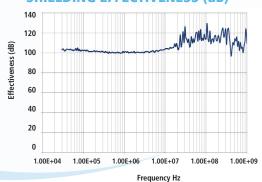
## **MARKETS**

- 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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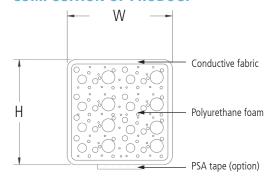
# **51K EMI Gaskets**

# Fabric-over-Foam

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.				

<sup>\*</sup> Part tested: 8 mm H x 10 mm W, rectangle shape

# **COMPOSITION OF PRODUCT**



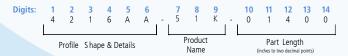
# PRESSURE SENSITIVE ADHESIVE (PSA TAPE) OPTIONS

Name	Туре	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 $\Omega$
LT-350	PSA	0.12	> 2 kgf/25 mm	-

<sup>\*</sup>Other PSA can be provided. Contact Laird Technologies engineering.

### **ORDERING INFORMATION**

### PART NUMBER EXAMPLE



### EMI-DS-FOF-51K 0712

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