

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

51N EMI Gaskets

Fabric-over-Foam



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

Laird Technologies' Fabric-over-Foam (FoF) 51N EMI gaskets provide excellent EMI shielding performance for customers where EMI issues occur. The 51N series EMI gaskets are composed of electrically conductive knitted mesh 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 51N 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 51N 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
- Halogen-free per IEC-61249-2-21 standard
- UL 94V0
- Low surface resistivity of < 0.10 Ω/□ provides excellent conductivity
- Shielding effectiveness of > 70 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 750,000 cycles
- 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

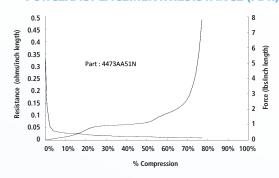
MARKETS

• Cabinet applications

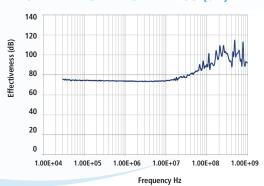


- Medical equipment
- Servers
- Printers
- Laptop computers
- Networking equipment
- Desktop computers
- Telecommunications cabinets

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



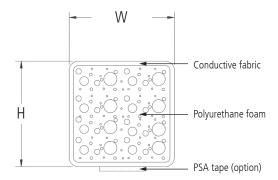
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Innovative Technology		
for a Connected	Worl	d

Item	Unit	Value	Test Method			
Shielding Effectiveness						
at 100 MHz		81	SAE-ARP-1705(Mod.)			
at 1 GHz	dB	85	(W10 mm x H8 mm)			
Surface Resistivity	Ω/□	< 0.10	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



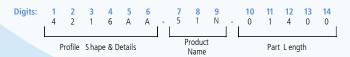
PRESSURE SENSITIVE ADHESIVE (PSA TAPE) OPTIONS

Name	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 Ω
LT-350	PSA	0.12	> 2 kgf/25 mm	-

^{*}Other PSA can be provided. Contact Laird Technologies engineering.

ORDERING INFORMATION

PART NUMBER EXAMPLE



EMI-DS-FOF-51N 0712