Laird
Smart Technology. Delivered.

# X1G Gaskets
## EcoTemp™ 85
## Fabric-over-Foam



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

Laird's EcoTemp™ 85 X1G EMI gaskets provide excellent EMI shielding performance for customers where EMI issues occur. The gaskets are composed of electrically conductive fabric wrapped around a newly developed urethane foam core which will satisfy the requests for higher temperature resistance and lower compression set. 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 gasket 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 gaskets can be further customized to an application by die-cutting, hole punching, notching, etc.

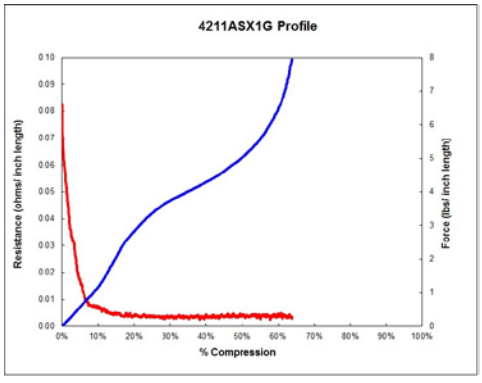
### FEATURES

- Fabric-over-Foam gaskets are RoHS compliant
- Halogen-free per IEC-61249-2-21 standard
- UL 94V0
- Low surface resistivity of < 0.07Ω/□ provides excellent conductivity
- Shielding effectiveness of >80 dB across a wide spectrum of frequencies
- 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's 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
- Higher performance with lower compression set values

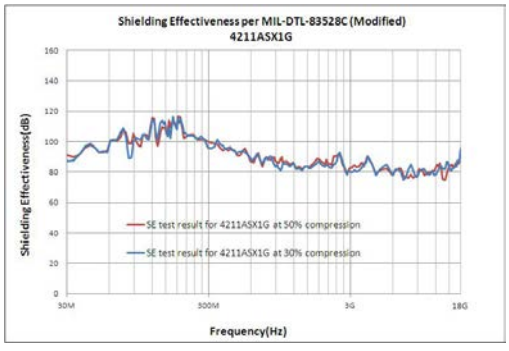
### MARKETS

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

### FORCE/DISPLACEMENT/RESISTANCE (FDR)




### SHIELDING EFFECTIVENESS (FDR)




USA: +1.866.928.8181
Europe: +49.0.8031.2460.0
Asia: +86.755.2714.1166

**www.lairdtech.com**

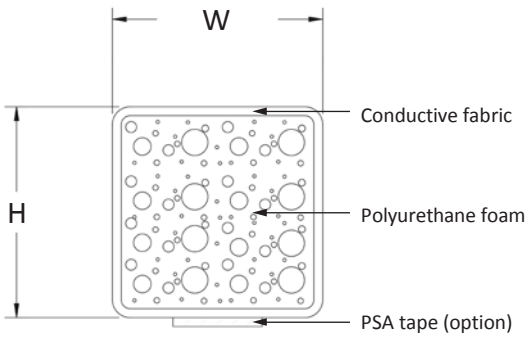
Laird
Smart Technology. Delivered.

# X1G Gaskets
## EcoTemp™ 85
## Fabric-over-Foam

| ITEM | UNIT | VALUE | TEST METHOD |
|---|---|---|---|
| Shielding Effectiveness | dB | | MIL-DTL-83528C (Mod.)* |
| 30MHz-300MHz | | 104 | |
| 300MHz-3GHz | | 89 | |
| 3GHz -30GHz | | 82 | |
| Surface Resistivity | Ω/□ | < 0.07 | ASTM F390 |
| Compression Set @ 70°C | % | < 10 | ASTM D3574* |
| Compression Set @ 85°C | % | < 15 | ASTM D3574* |
| Operation Temperature | °C | -40 to 85 | - |
| Flame Retardant | UL 94V0 (UL file No.E170327 designation V0 041) | | |
| 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. | | |

*Part tested 5mm H x 10mm W rectangle

## 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 Engineering.

Values presented have been determined by standard test methods and are typical values not to be used for specification purposes.

## 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 | - | X | 1 | G | - | 0 | 1 | 4 | 0 | 0 |
| | Profile shape & details | | | | | | | Product Name | | | | Part Length | | | | |

EMI-DS-FOF-X1G 060915

Any information furnished by Laird 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 materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird, Laird Technologies, Inc or any of its affiliates or agents shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Technologies' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2015 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trademarks or registered trademarks 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 or any third party intellectual property rights.