



## NI/CU POLYESTER KNITTED MESH

Laird Technologies' Electron® Nickel/Copper Polyester Knitted Mesh is a unique fabric, manufactured using a patented, proprietary technology. This technology combines highly conductive copper and corrosion resistant nickel with the lightweight, flexibility, conformability, breathability and uniform appearance of a knitted mesh. Mesh offers excellent surface conductivity, shielding effectiveness, and reflectivity for a variety of applications.

Electron® Nickel/Copper Polyester Knitted Mesh can be used in many different configurations to protect against EMI/RFI for a variety of applications and environments. Typical applications include: enclosures, curtains, gaskets, cable wrap, tapes, shielding laminates, and grounding.

### FEATURES

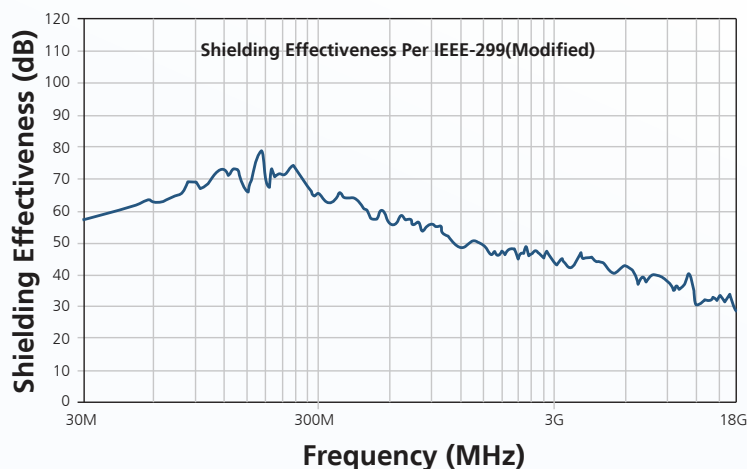
- RoHS compliant
- Halogen-free per IEC-61249-2-21 standard
- Low surface resistivity of  $\leq 0.10 \Omega/\square$  provides excellent conductivity

### MARKETS

- Cabinet applications
- LCD and Plasma TV
- Medical equipment
- Servers
- Printers
- Laptop computers



### Ni/Cu Polyester Mesh (3070-500) Shielding Effectiveness



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

## PHYSICAL PROPERTIES

Item	Unit	Value	Advantage
Substrate		Polyester Knit Mesh	Breathable, Flexible, Conformable
Metal		Ni/Cu	Corrosion Resistant, Highly Conductive
Total Weight	oz/yd <sup>2</sup> (g/m <sup>2</sup> )	1.3 – 2.3 (44– 78)	Light Weight
Thickness, (nominal)	inches (microns)	0.007 (178)	Thin and Flexible
Metal Weight	oz/yd <sup>2</sup> (g/m <sup>2</sup> )	0.40 – 0.80 (13.5 -27.0)	Excellent Electrical Properties
Max Short Duration Temperature	°C	210	Allows Thermal Processing

## ELECTRICAL PROPERTIES

Item	Unit	Value
Surface Resistivity (ASTM F390)	ohms/square	≤ 0.01
Far-field Shielding	effectiveness	(typical)
30 MHz to 300 MHz	dB	68 average
300 MHz to 3 GHz	dB	53 average
3 GHz to 18 GHz	dB	38 average

## MECHANICAL PROPERTIES

Item	Unit	Value <sup>†</sup>
Tensile Strength, CMD/MD <sup>°</sup> (ASTM D5035)	lb/in (N/100mm)	20/20 (352/352)
Elongation, MD (ASTM D5035)		30%

<sup>†</sup> Typical values for greige fabric

<sup>°</sup> Cross Machine Direction/Machine Direction

# Mouser Electronics

Authorized Distributor

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Laird:

[3070-500-RUB](#)