Flexible Shielding Mesh

WIN-SHIELD™ Mesh

Customer Value Proposition:

WIN-SHIELD Mesh provides exceptional shielding performance and can be used as an optical product, to cover airflow openings, to wrap cable or other applications where a flexible shielding mesh is necessary.

WIN-SHIELD Mesh has light transmission of greater than 60% and is used as a standard mesh in many optical products. This mesh is tough enough to be used in a standalone fashion. The blackened copper plating reduces glare for improved visibility. In addition, this mesh can be stretched across small vent openings in an electronics enclosure to aid in shielding while allowing airflow.

WIN-SHIELD Mesh is made from 0.0012” diameter blackened copper plated stainless steel wire. The proprietary blackening process provides high performance EMI shielding by allowing direct grounding contact between the mesh and the enclosure surface. Maximum EMI shielding can be achieved by using 100 OPI (openings per inch). The blackening coating is very stable giving uniform coloring with no dusting or smudging of the coating.

Product Features:

• EMI Shielding for vents and displays
• Easy to form into shapes
• Sheets can be diecut into unique shapes
• Retrofit shielding on legacy equipment
• Used as EMI shielding vent material
• 70% open area
• Flexible material with 100 OPI mesh
• Mesh can be integrated into glass or plastic window for a fully supported EMI solution
• Available in 100, 80, 50 OPI
• Standard sheet size: 18” x 24” (457 x 610 mm)

Typical Applications:

• Cover displays and airflow openings in cabinets
• Military electronics
• Retrofit EMI Shielded displays
• Cable wrap
• Flexible circuits shielding

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## Technical Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>M-50-1824</th>
<th>M-80-1824</th>
<th>M-100-1824</th>
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</thead>
<tbody>
<tr>
<td>Openings Per Inch</td>
<td>50 OPI</td>
<td>80 OPI</td>
<td>100 OPI</td>
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<tr>
<td>Open Area</td>
<td>80%</td>
<td>75%</td>
<td>70%</td>
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<tr>
<td>Sheet Size</td>
<td>18” x 24” (457 x 610 mm)</td>
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<tr>
<td>Minimum Order Quantity</td>
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<tr>
<td>Material</td>
<td>Blackened Copper Plated Stainless Steel</td>
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<tr>
<td>Wire Diameter</td>
<td>0.0012” (0.030 mm)</td>
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<td>Surface Conductivity</td>
<td>&lt;0.100 ohms/sq</td>
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<tr>
<td>Typical Operating Temperature Range</td>
<td>-40 to +70°C (-40 to +160°F)</td>
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<tr>
<td>Storage</td>
<td>25°C (80°F), 50% relative humidity</td>
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**Shielding Effectiveness**

[Graph showing shielding effectiveness of different part numbers across frequency (MHz).]

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www.chomerics.com  
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