Excellent EMI shielding around LCDs and other apertures
- ITO (Indium Tin Oxide) conductive film with great optical transparency
- Protected by removable PET film on both surfaces for easy transport
- Grounding with soft conductive fabric tape is recommended to protect ITO
- Low surface resistance for EMI shielding

**Cross-section view**

**WINAL50-005**
- Surface protection film (clear)
- Transparent conductive film
- Pet film (50μm)
- Hard coating layer
- Surface protection film (clear)

**WINAL100-020**
- Surface protection film (green)
- Transparent conductive film
- Pet film (100μm)

**WINAL75-080**
- Surface protection film (green)
- ITO layer
- Pet film (75μm)
- Surface protection film (clear)

**Specification**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>WINAL75-080</th>
<th>WINAL100-020</th>
<th>WINAL50-005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness (μm)</td>
<td>75</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>Standard Sheet Size (mm)</td>
<td>420 x 600</td>
<td>210 x 297</td>
<td>—</td>
</tr>
<tr>
<td>Shielding Effectiveness (dB/1GHz)</td>
<td>10</td>
<td>22</td>
<td>30</td>
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<tr>
<td>Total Light Transmittance</td>
<td>76</td>
<td>76</td>
<td>80</td>
</tr>
<tr>
<td>Surface Resistance (Ω/□)</td>
<td>80</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Flame Retardancy (UL94)</td>
<td>VTM-2 equivalent</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Operating Temperature (˚C)</td>
<td>-30˚- 80˚</td>
<td>-30˚- 80˚</td>
<td>-30˚- 80˚</td>
</tr>
</tbody>
</table>

**Characteristics**

**MID-STD-285 Measurement (Electric Field)**

**Custom liner options**
- Addition of conductive fabric tape layer
- Custom die cutting
- Hole punching

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