**CHO-SHRINK Conductive Heat Shrinkable Shielding**

CHO-SHRINK tubing is a heat shrinkable polyolefin tubing which provides effective EMI shielding for cables, connectors and cable/connector terminations. CHO-SHRINK offers significant weight savings over conventional metal braid shielding, and can be applied easily with standard shrink tubing heating devices.

The main feature of CHO-SHRINK tubing is Chomerics’ unique conductive coating, which is applied to the surface of the tubing and which remains flexible, uniform and intact even after maximum shrinking. The coating, a silver-based system, can be applied to the inside or outside surfaces, or both. Standard CHO-SHRINK tubing is conductive on the inside only.

### AVAILABLE STANDARD DIAMETERS AND WALL THICKNESSES

<table>
<thead>
<tr>
<th>Expanded Inside Diameter inches (mm)</th>
<th>Expanded Inside Diameter Code*</th>
<th>Recovered Wall Thickness inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/8 (3.18)**</td>
<td>0002</td>
<td>.020 (0.51)</td>
</tr>
<tr>
<td>3/16 (4.76)***</td>
<td>0003</td>
<td>.020 (0.51)</td>
</tr>
<tr>
<td>1/4 (6.35)</td>
<td>0004</td>
<td>.025 (0.63)</td>
</tr>
<tr>
<td>3/8 (9.53)</td>
<td>0006</td>
<td>.025 (0.63)</td>
</tr>
<tr>
<td>1/2 (12.7)</td>
<td>0008</td>
<td>.025 (0.63)</td>
</tr>
<tr>
<td>3/4 (19.05)</td>
<td>0012</td>
<td>.030 (0.76)</td>
</tr>
<tr>
<td>1 (25.4)</td>
<td>0016</td>
<td>.035 (0.89)</td>
</tr>
<tr>
<td>1-1/2 (38.1)</td>
<td>0024</td>
<td>.040 (1.02)</td>
</tr>
</tbody>
</table>

* See ordering information. ** Two-foot maximum length. *** Four-foot maximum length. For custom sizes contact Chomerics

**Typical Properties**

- **Operating Temperature** ............... –66° to 275°F (–54° to 135°C)
- **Shrink Temperature** .................. 250°F (121°C) (min.)
  375°F (191°C) (max.)
- **Dielectric Strength**
  - Tubing - per ASTM D876 ............... 500 V/mil
  - Boots - per ASTM D876 ............... 200 V/mil
- **Shrink Ratio** .......................... 60-85%
- **Tensile Strength** ........................ 1500 psi (10.34 MPa)
- **Shielding Effectiveness** ............... See Figure 1

* Recovered base material. ** After 100% recovery.

**Ordering Procedure**

Use the following part numbering system to order CHO-SHRINK tubing. Standard (stocked) length is 4 feet. Ordering quantity should specify total length required. Part number indicates length of pieces.


Standard available length is 4 feet (1.22 m). For longer lengths, CHO-SHRINK sections may be “spliced” together using short pieces of outside-coated tubing to maintain electrical continuity from one length to the next.

Other CHO-SHRINK products include thin-wall sleeves and molded boots, transitions and breakouts.

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**Figure 1 Shielding Effectiveness of CHO-SHRINK Compared to Wire Braid**

- CHO-SHRINK/Braid (RG-214/U)
- Braid (RG-214/U)
- CHO-SHRINK

Example: 70-21-0016-0004 is 4 feet of 1 in. dia. tubing coated inside.
**Connector Boots and Cable Transitions**

CHO-SHRINK connector boots provide EMI shielding, shield grounding and strain relief at connector backshell terminations. Chomerics’ unique conductive coating applied to the inside surface assures an average of 60-80 dB of attenuation at 1 GHz.

CHO-SHRINK boots shrink to a wide range of cable diameters (shrink ratio is 4:1), and offer a 40-65% weight savings compared to metal EMI adapters. They are supplied with an optional conductive hot-melt adhesive/sealant applied to each end. For optimum mechanical strength, CHO-SHRINK lipped boots should be shrunk over shrink boot adapters which provide a knurled and grooved surface.

CHO-SHRINK polyolefin cable transitions are available in a variety of shapes and sizes to provide shielding continuity for customized cable assemblies and harnesses.

Typical CHO-SHRINK boots and transitions are shown below. Request Technical Bulletin 24 for part number and dimensional information on these standard parts. Consult Chomerics’ Applications Engineering Department for assistance in specifying and ordering specialized parts.