Heat Shrink Tubing
Dual Wall w/Adhesive, 3:1 Shrink Ratio
(Includes Assortment Packs)

Description:
NTE’s Dual Wall Heat Shrink Tubing is flexible, polyolefin based heat-shrinkable tubing with a thermoplastic adhesive inner liner which flows when heated. After shrinkage and upon cooling, it provides a permanent flexible water proof barrier. This tubing is suitable for a wide range of applications, such as encapsulation cables, wires, electrical components and splices. The choice of high shrink ratios means more flexibility of usage such as in the covering of irregular shaped objects.

Specifications:
- MIL–DTL–23053/4, Class 3

Features:
- Available in Black, Blue, Red, Green, Yellow, White and Clear

Technical Data:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D 638</td>
<td>10 N/mm²</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>ASTM D 638</td>
<td>300%</td>
</tr>
<tr>
<td>Longitudinal Change</td>
<td>ASTM D 2671</td>
<td>+5%, −10% Maximum</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM D 570</td>
<td>0.5%</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>ASTM D 792</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Chemical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fungus Resistance</td>
<td>MIL–1–7444</td>
<td>Inert</td>
</tr>
<tr>
<td>Fluid Resistance</td>
<td>MIL–1–23053/4</td>
<td>Good</td>
</tr>
<tr>
<td>Copper Corrosion</td>
<td>ASTM D 2671 B</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Thermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous Operating Temperature</td>
<td></td>
<td>−55° to +85°C</td>
</tr>
<tr>
<td>Minimum Shrink Temperature</td>
<td></td>
<td>&gt; +110°C</td>
</tr>
<tr>
<td>Heat Shock (4 Hours at +250°C)</td>
<td>ASTM D 2671</td>
<td>No Dripping, Cracking or Flowing of Outer Wall</td>
</tr>
<tr>
<td>Heat Aging (168 Hours at +150°C)</td>
<td>ASTM D 638</td>
<td>Elongation 300%</td>
</tr>
<tr>
<td>Low Temperature Flexibility (−55°C)</td>
<td>ASTM D 2671 C</td>
<td>No Cracking</td>
</tr>
<tr>
<td>Flammability (Outer Wall ONLY)</td>
<td>UL 224</td>
<td>Pass (Except Clear)</td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dielectric Strength</td>
<td>ASTM D 2671</td>
<td>15kV/mm</td>
</tr>
<tr>
<td>Volume Resistivity</td>
<td>ASTM D 257</td>
<td>10 @ 14 ohm.cm</td>
</tr>
</tbody>
</table>
**Products Covered:**  (Note 1)

<table>
<thead>
<tr>
<th>NTE Catalog Number</th>
<th>Size (inch)</th>
<th>I.D. (in mm)</th>
<th>Rec. Wall Thickness (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>47–23048–BK</td>
<td>47–25006–BK</td>
<td>1/8</td>
<td>3.0</td>
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<tr>
<td>47–23148–BK</td>
<td>47–25106–BK</td>
<td>3/16</td>
<td>4.8</td>
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<tr>
<td>47–23248–BK</td>
<td>47–25206–BK</td>
<td>1/4</td>
<td>6.0</td>
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<tr>
<td>47–23348–BK</td>
<td>47–25306–BK</td>
<td>3/8</td>
<td>9.0</td>
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<tr>
<td>47–23448–BK</td>
<td>47–25406–BK</td>
<td>1/2</td>
<td>12.0</td>
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<tr>
<td>47–23548–BK</td>
<td>47–25506–BK</td>
<td>3/4</td>
<td>18.0</td>
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<tr>
<td>47–23648–BK</td>
<td>47–25606–BK</td>
<td>1</td>
<td>24.0</td>
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<tr>
<td>47–23748–BK</td>
<td>47–25706–BK</td>
<td>1 1/4</td>
<td>30.5</td>
</tr>
<tr>
<td>47–23848–BK</td>
<td>47–25806–BK</td>
<td>1 1/2</td>
<td>39.0</td>
</tr>
</tbody>
</table>

Note 1. BK designates Black. For alternate colors, replace BK with:
- BL = Blue, R = Red, G = Green, Y = Yellow, W = White, CL = Clear.

### Assorted Dual Wall Packages:

<table>
<thead>
<tr>
<th>NTE Part No.</th>
<th>Color</th>
<th>Diameter (Inches)</th>
<th>Length (Inches)</th>
<th>Pieces</th>
<th>Bag/Box</th>
</tr>
</thead>
</table>