



ELECTRONICS, INC.  
44 FARRAND STREET  
BLOOMFIELD, NJ 07003  
(973) 748-5089  
<http://www.nteinc.com>



## 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:

Properties	Test Method	Typical Value
<b>Physical</b>		
Tensile Strength	ASTM D 638	10 N/mm <sup>2</sup>
Elongation at Break	ASTM D 638	300%
Longitudinal Change	ASTM D 2671	+5%, -10% Maximum
Water Absorption	ASTM D 570	0.5%
Specific Gravity	ASTM D 792	1.3
<b>Chemical</b>		
Fungus Resistance	MIL-1-7444	Inert
Fluid Resistance	MIL-1-23053/4	Good
Copper Corrosion	ASTM D 2671 B	Good
<b>Thermal</b>		
Continuous Operating Temperature		-55° to +85°C
Minimum Shrink Temperature		> +110°C
Heat Shock (4 Hours at +250°C)	ASTM D 2671	No Dripping, Cracking or Flowing of Outer Wall
Heat Aging (168 Hours at +150°C)	ASTM D 638	Elongation 300%
Low Temperature Flexibility (-55°C)	ASTM D 2671 C	No Cracking
Flammability (Outer Wall <b>ONLY</b> )	UL 224	Pass (Except Clear)
<b>Electrical</b>		
Voltage Rating		1000V
Dielectric Strength	ASTM D 2671	15kV/mm
Volume Resistivity	ASTM D 257	10 @ 14 ohm.cm

**NOTE: July 2018 – NTE certifies that the materials contained in this product meet the requirements of California Prop 65.**

**Products Covered:** (Note 1)

NTE Catalog Number		Size (inch)	I.D. (in mm)		Rec. Wall Thickness (mm)
48"	6"		Exp.	Rec.	
47-23048-BK	47-25006-BK	1/8	3.0	1.0	0.5
47-23148-BK	47-25106-BK	3/16	4.8	1.5	0.5
47-23248-BK	47-25206-BK	1/4	6.0	2.0	0.5
47-23348-BK	47-25306-BK	3/8	9.0	3.0	0.6
47-23448-BK	47-25406-BK	1/2	12.0	4.0	0.7
47-23548-BK	47-25506-BK	3/4	18.0	6.0	0.8
47-23648-BK	47-25606-BK	1	24.0	8.0	1.0
47-23748-BK	47-25706-BK	1 1/4	30.5	10.0	1.0
47-23848-BK	47-25806-BK	1 1/2	39.0	13.0	1.0

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:**

NTE Part No.	Color	Diameter (Inches)	Length (Inches)	Pieces	Bag/Box
HS-ASST-13	Black	1/8 (20 Pieces), 3/16 (16 Pieces), 1/4 (12 Pieces), 3/8 (10 Pieces), 1/2 (8 Pieces), 3/4 (6 Pieces)	4	72	Box