HRHT (High Ratio Heat-Shrink Tubing)

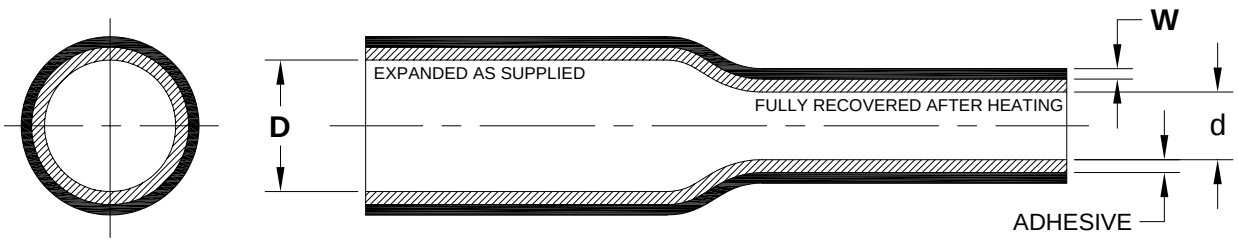

Table of Dimensions, inch (mm):

Part Description	Expanded I.D. D, Min.	Recovered I.D. d, Max.	Recovered Wall W, Ref.
HRHT-1/X	0.75 *(19)*	0.12 *(3.0)*	0.155 *(3.9)*
HRHT-2/X	1.50 *(38)*	0.23 *(5.8)*	0.155 *(3.9)*
HRHT-3/X	2.00 *(51)*	0.36 *(9.0)*	0.155 *(3.9)*
HRHT-4/X	3.00 *(76)*	0.50 *(12.7)*	0.155 *(3.9)*
HRHT-5/X	4.50 *(114)*	0.75 *(19.0)*	0.155 *(3.9)*

Notes:

1. The hi-ratio tubing is heat-shrinkable and has expansion ratios as high as 6:1.
2. "X" indicates reference-recovered length in inches (e.g. for 3.0-inch length: HRHT-2/3). The tolerance shall be +/- 10% of the specified recovered length.
3. The tubing is UL recognized in sizes 1 through 4 only. The reference number is E85381(R).

Material: -152, heat shrinkable, crosslinked flexible polyolefin.
Standard factory applied hot melt adhesive is /97 or /42, as required.

Color: Black

Specification Reference:

Item	Specification
Heat-shrinkable tubing	SAE-AS81765/1
Adhesive /97, S1297	RW-2019
Adhesive /42, S1017	RT-1050/1

CUSTOMER DRAWING

Tyco Electronics	Raychem Tubing 305 Constitution Drive, Menlo Park, CA 94025			TITLE: **HRHT** **High Ratio Heat-Shrink Tubing**		
Unless otherwise specified dimensions are in inches. [Metric dimensions are shown in brackets				DOCUMENT NO.: **HRHT-1thru5/X**		
Tyco Electronics reserves the right to amend this drawing at any time. Users should evaluate the suitability of the product for their application.				REV: C		
				SCALE: None	DATE: July 15, 2009	
DRAWN BY: U. Nguyen	CAGE CODE: 06090	Org. Date: 5/28/09	File: HRHT-1thru5X.doc	DCR NO. : R090640	SIZE A	SHEET: 1 of 2

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Table 2: Properties

	Property	Performance	Test Method
Physical	Tensile Strength	1200 psi (8.3 Mpa) minimum	ASTM D-412
	Ultimate Elongation	250% minimum	ASTM D-412
	Specific Gravity	1.4 maximum	ASTM D-792
	Water Absorption	0.5% maximum	ASTM D-570 A
	Hardness	35 ± 5 Shore D	ASTM D-2240
	Flammability	Pass	ASTM D-635
	Corrosion Resistance	Pass	MIL-I-81765
	Low Temperature Flexibility 4 hours at –67 ± 2°F (-55 ± 1°C)	Pass	MIL-I-81765
	Heat Resistance 168 hours at 347± 2°F (175 ± 1°C)	Ultimate elongation, 200% minimum Tensile strength, 1000 psi (6.9 Mpa) minimum	MIL-I-81765
	Heat Shock 4 hours at 437 ± 5°F (225 ± 2°C)	No cracking, dripping or flowing	MIL-I-81765
Elastic Memory		275% minimum expansion to 4 inch (10 cm) of a fully recovered test specimen and 93% recovery of expanded specimen after oven conditioning for 1 minute at 302 ± 4°F (150 ± 2°C)	
Electrical	Dielectric Strength	200 V/mil (7880 V/mm) minimum	ASTM D-149
	Volume Resistivity	10^{12} ohm-cm minimum	ASTM D-257
Chemical Fluid Resistance		Ultimate elongation, 200% minimum Tensile strength, 750 psi (5.2 Mpa) minimum	MIL-I-81765
Operating Temperature		-131 to + 275°F (-55 to +135° C) (without adhesive)	