

# Single Wall Products

Single Wall heat shrinkable tubing is used in the electronics,automotive,military&aerospace sectors in a variety of applications,including:

- Mechanical Protection
- Abrasion Protection
- Strain Relief
- Moisture Protection
- Cable Insulation
- Marking & Bundling of electronic components

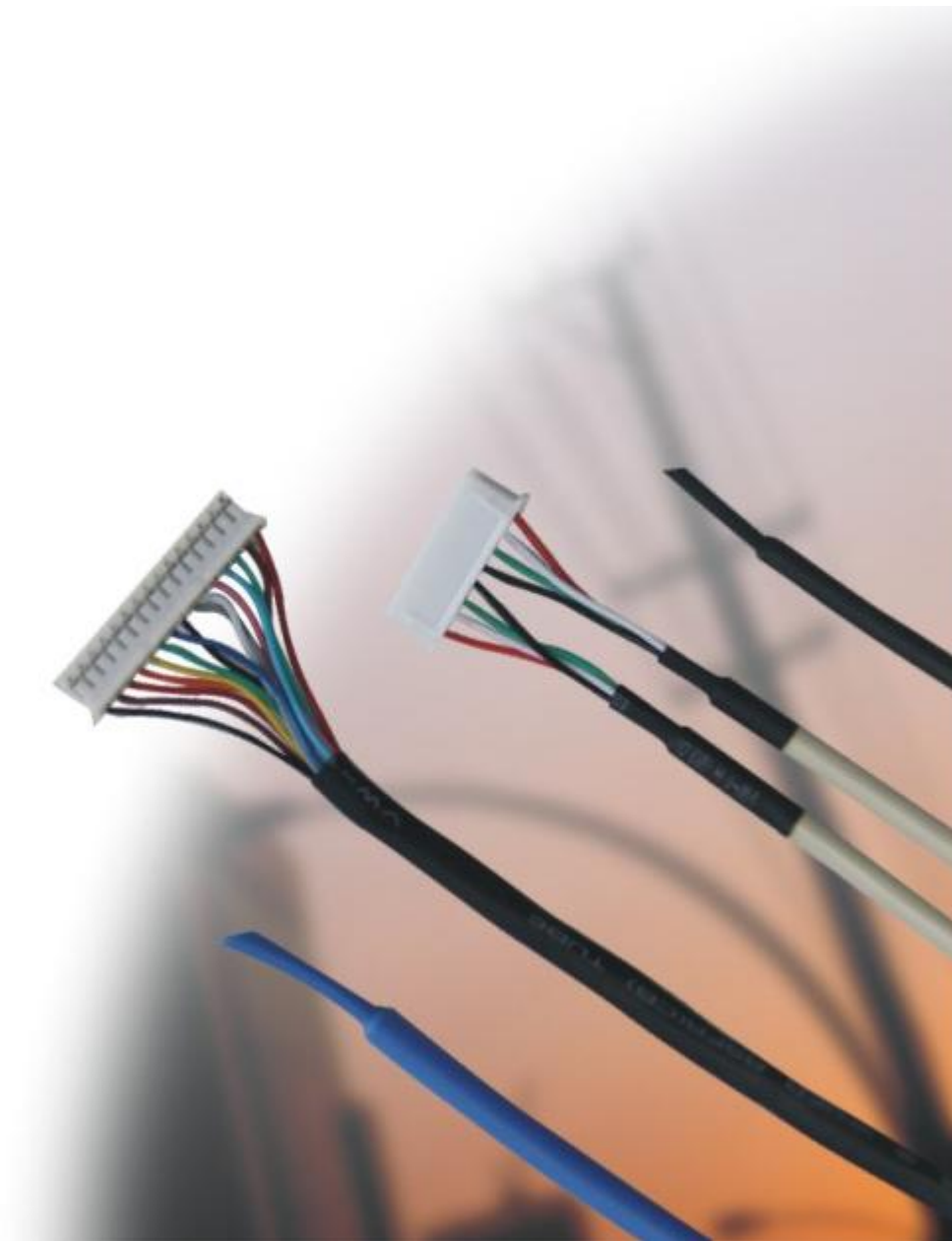


## RSFR-135G

Flame retardant, multi-purpose  
heat shrink tubing

### Features

- Flexible
- Suitable for various applications
- Continuous Operating Temperature:  $-55^{\circ}\text{C}$  to  $135^{\circ}\text{C}$
- Shrink Temperature:  $110^{\circ}\text{C}$
- RoHS Compliant
- Meets SAE-AMS-DTL-23053/5 Class 1 and 3
- UL/CSA



## Dimension

<b>EXPANDED</b>	<b>RECOVERD</b>		<b>DELIVERY</b>
INTERNAL DIAMETER (MIN) D mm	INTERNAL DIAMETER (MAX) D mm	WALL THICKNESS (NOM) W mm	SPOOL LENGTH M
0.8	0.50	0.22	200
1.0	0.65	0.28	200
1.5	0.85	0.32	200
2.0	1.00	0.35	200
2.5	1.30	0.38	200
3.0	1.50	0.40	200
3.5	1.80	0.42	200
4.0	2.00	0.45	200
4.5	2.30	0.50	200
5.0	2.5	0.55	100
6.0	3.0	0.55	100
7.0	3.5	0.55	100
8.0	4.0	0.60	100
9.0	4.5	0.60	100
10.0	5.0	0.60	100
11	5.5	0.60	100
12	6.0	0.60	100
13	6.5	0.65	100
14	7.0	0.65	100
15	7.5	0.70	100
16	8.0	0.70	100
17	8.5	0.70	100
18	9.0	0.80	100
20	10.0	0.80	100
22	11.0	0.80	100
25	12.5	0.90	100
28	14.0	0.90	50
30	15.0	0.95	50
35	17.0	1.00	50
40	20.0	1.00	50
45	22.5	1.00	25
50	25.0	1.00	25
60	31.0	1.30	25
70	36.0	1.30	25
80	41.0	1.46	25
90	46.0	1.46	25
100	51.0	1.46	25

## Technical Data

### Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D2671	10.4MPa
Elongation(%)	ASTM D2671	200%

### Electrical

Property	Test Method	Typical Performance
Dielectric Strength	IEC 243	≥15kv/mm
Volume Resistivity	IEC 93	≥1×10 <sup>14</sup> Ω • cm

## RSFR-135G(3X)

High shrink ratio,flexible  
heat shrink tubing

### Features

- Flexible
- High shrink ratio
- Flame retardant
- Resistant to common fluids and solvents
- Continuous Operating Temperature:-55°C to 135°C
- Shrink Temperature:120°C
- RoHS Compliant
- UL

<b>EXPANDED</b>	<b>RECOVERD</b>		<b>DELIVERY</b>
INTERNAL DIAMETER (MIN) D mm	INTERNAL DIAMETER (MAX) D mm	WALL THICKNESS (NOM) W mm	SPOOL LENGTH M
1.5	0.5	0.45	200
3.0	1.0	0.55	200
4.5	1.0	0.60	100
6.0	2.0	0.65	100
9.0	3.0	0.75	50
12.0	4.0	0.75	50
15.0	5.0	0.80	50
18.0	6.0	0.85	50
24.0	8.0	1.00	25
30.0	10.0	1.15	1.22meter/pc
39.0	13.0	1.50	1.22meter/pc
50	16	2.50	1meter/pc
60	20	2.60	1meter/pc
70	23	2.60	1meter/pc
80	26	2.60	1meter/pc
90	30	2.60	1meter/pc
100	33	2.60	1meter/pc

## Technical Data

### Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D2671	<b>10.4MPa</b>
Elongation(%)	ASTM D2671	<b>200%</b>

### Electrical

Property	Test Method	Typical Performance
Dielectric Strength	IEC 243	<b>≥15kv/mm</b>
Volume Resistivity	IEC 93	<b>≥1×10<sup>14</sup>Ω·cm</b>

## W-1-PT

Universal heat shrink tubing with excellent physical and mechanical properties

### Features

- Flexible
- Flame retardant
- Continuous Operating Temperature:-55°C to 125°C
- Shrink Temperature:70°C~125°C
- RoHS Compliant
- UL/CSA



## Dimension

<b>EXPANDED</b>	<b>RECOVERD</b>		<b>DELIVERY</b>
INTERNAL DIAMETER (MIN) D mm	INTERNAL DIAMETER (MAX) D mm	WALL THICKNESS (NOM) W mm	SPOOL LENGTH M
0.8	0.50	0.22	200
1.0	0.65	0.28	200
1.5	0.85	0.32	200
2.0	1.00	0.35	200
2.5	1.30	0.38	200
3.0	1.50	0.40	200
3.5	1.80	0.42	200
4.0	2.00	0.45	200
4.5	2.30	0.50	100
5.0	2.5	0.55	100
6.0	3.0	0.55	100
7.0	3.5	0.55	100
8.0	4.0	0.60	100
9.0	4.5	0.60	100
10.0	5.0	0.60	100
11	5.5	0.60	100
12	6.0	0.60	100
13	6.5	0.65	100
14	7.0	0.65	100
15	7.5	0.70	100
16	8.0	0.70	100
17	8.5	0.70	100
18	9.0	0.80	100
20	10.0	0.80	100
22	11.0	0.80	100
25	12.5	0.90	100
28	14.0	0.90	50
30	15.0	0.95	50
35	17.0	1.00	50
40	20.0	1.00	50
45	22.5	1.00	25
50	25.0	1.00	25
60	31.0	1.30	25
70	36.0	1.30	25
80	41.0	1.46	25
90	46.0	1.46	25
100	51.0	1.46	25
120	61	1.56	25
150	76	1.56	25
180	91	1.56	25

## Technical Data

### Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D2671	10.4MPa
Elongation(%)	ASTM D2671	200%
Tensile Strength after Heat aging	UL 224 158°C X 168hrs	≥7.3
Elongation after Heat aging	UL 224 158°C X 168hrs	≥100
Heat shock	UL 224 250°C X 4hrs	NO dripping NO cracking

### Electrical

Property	Test Method	Typical Performance
Dielectric Strength	IEC 243	≥15kv/mm
Volume Resistivity	IEC 93	≥1×10 <sup>14</sup> Ω • cm

### Chemical

Property	Test Method	Typical Performance
Corrosion Action	UL 224 158°C X 168hrs	≥15kv/mm
Copper Compatibility	UL 224 158°C X 168hrs	PASS

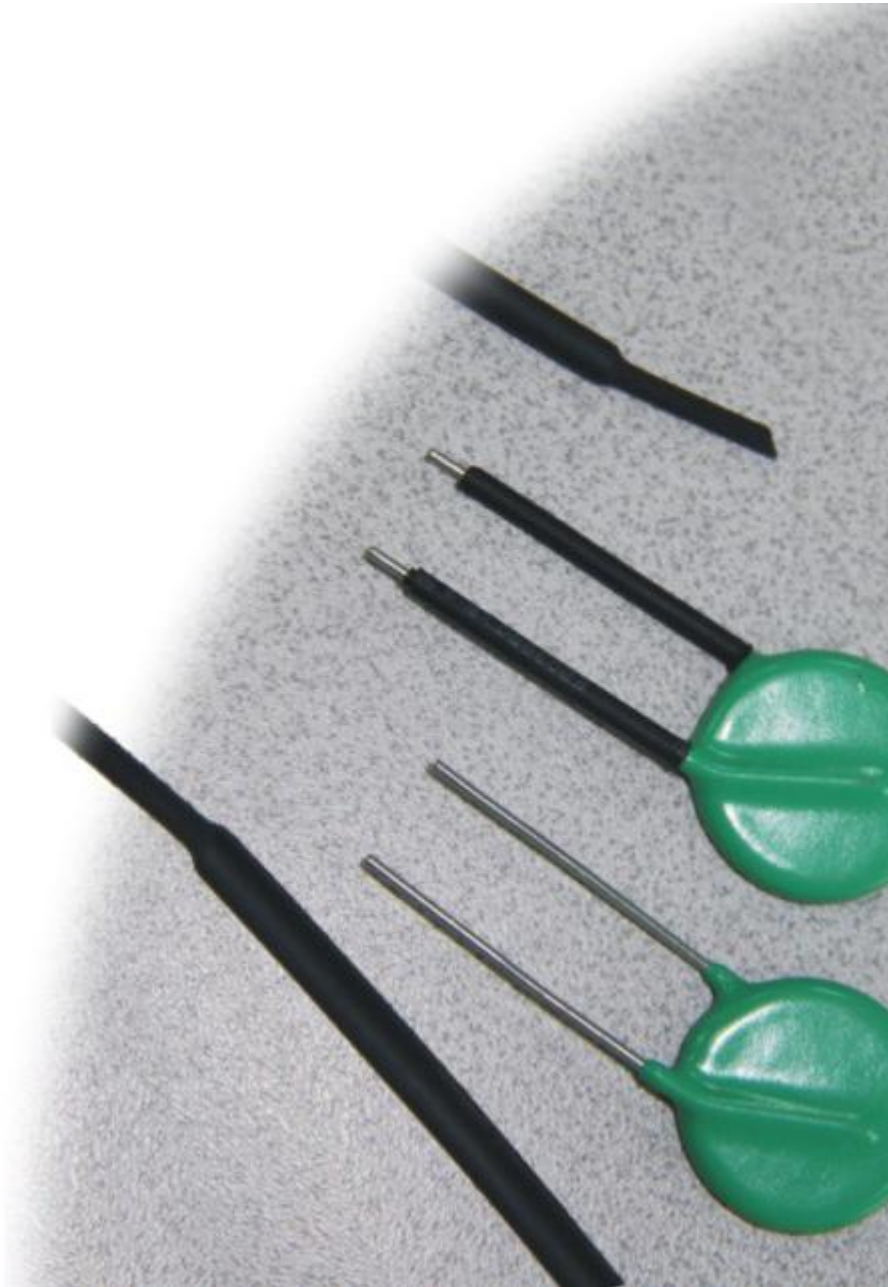


## W-1-PTCB

Ultra thin wall,very flexible  
heat shrink tubing

### Features

- Ultra thin wall
- Very Flexible
- Flame retardant
- Continuous Operating Temperature:-55°C to 125°C
- Shrink Temperature:70°C~110°C
- RoHS Compliant
- UL



## Dimension

<b>EXPANDED</b>	<b>RECOVERD</b>		<b>DELIVERY</b>
INTERNAL DIAMETER (MIN) D mm	INTERNAL DIAMETER (MAX) D mm	WALL THICKNESS (NOM) W mm	SPOOL LENGTH M
1.0CB	0.65	0.20	200
1.5CB	0.85	0.20	200
2.0CB	1.00	0.22	200
2.5CB	1.30	0.25	200
3.0CB	1.50	0.28	200
3.5CB	1.80	0.28	200
4.0CB	2.00	0.30	200
4.5CB	2.30	0.35	100
5.0CB	2.5	0.32	100
6.0CB	3.0	0.32	100
7.0CB	3.5	0.32	100
8.0CB	4.0	0.32	100
9.0CB	4.5	0.35	100
10CB	5.0	0.35	100
11CB	5.5	0.40	100
12CB	6.0	0.40	100
13CB	6.5	0.40	100
14CB	7.0	0.40	100
15CB	7.5	0.40	100
16CB	8.0	0.40	100
18CB	9.0	0.42	100
20CB	10.0	0.45	100
22CB	11.0	0.45	100
25CB	12.5	0.45	50

## Technical Data

### Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D2671	<b>10.4MPa</b>
Elongation(%)	ASTM D2671	<b>200%</b>
Tensile Strength after Heat aging	UL 224 158°C X 168hrs	<b>≥7.3</b>
Elongation after Heat aging	UL 224 158°C X 168hrs	<b>≥100</b>
Heat shock	UL 224 250°C X 4hrs	NO dripping NO cracking

**Electrical**

Property	Test Method	Typical Performance
Dielectric Strength	IEC 243	$\geq 15\text{kv/mm}$
Volume Resistivity	IEC 93	$\geq 1 \times 10^{14} \Omega \cdot \text{cm}$

**Chemical**

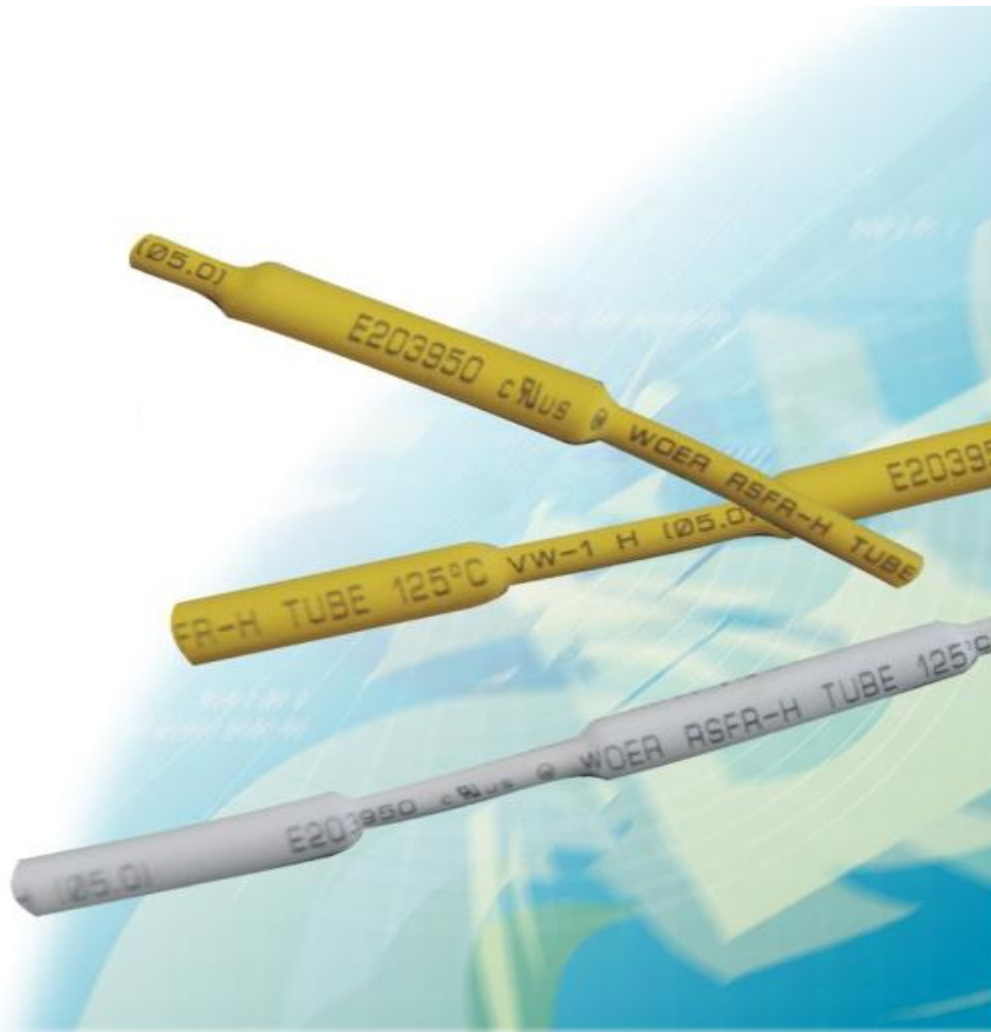
Property	Test Method	Typical Performance
Corrosion Action	UL 224 158°C X 168hrs	$\geq 15\text{kv/mm}$
Copper Compatibility	UL 224 158°C X 168hrs	PASS

# RSFR-125H

Zero halogen,flexible  
heat shrink tubing

## Features

- Flexible
- Zero halogen
- Flame retardant
- low smoke generation if burning
- Continuous Operating Temperature:-45°C to 125°C
- Shrink Temperature:120°C
- RoHS and Sony compliant
- UL/CSA



## Dimension

<b>EXPANDED</b>	<b>RECOVERD</b>		<b>DELIVERY</b>
INTERNAL DIAMETER (MIN) D mm	INTERNAL DIAMETER (MAX) D mm	WALL THICKNESS (NOM) W mm	SPOOL LENGTH M
0.8	0.50	0.22	200
1.0	0.65	0.28	200
1.5	0.85	0.32	200
2.0	1.00	0.35	200
2.5	1.30	0.38	200
3.0	1.50	0.40	200
3.5	1.80	0.42	200
4.0	2.00	0.45	200
4.5	2.30	0.50	200
5.0	2.5	0.55	100
6.0	3.0	0.55	100
7.0	3.5	0.55	100
8.0	4.0	0.60	100
9.0	4.5	0.60	100
10.0	5.0	0.60	100
11	5.5	0.60	100
12	6.0	0.60	100
13	6.5	0.65	100
14	7.0	0.65	100
15	7.5	0.70	100
16	8.0	0.70	100
17	8.5	0.70	100
18	9.0	0.80	100
20	10.0	0.80	100
22	11.0	0.80	100
25	12.5	0.90	100
28	14.0	0.90	50
30	15.0	0.95	50
35	17.0	1.00	50
40	20.0	1.00	50
45	22.5	1.00	25
50	25.0	1.00	25
60	31.0	1.30	25
70	36.0	1.30	25
80	41.0	1.46	25
90	46.0	1.46	25
100	51.0	1.46	25
120	61	1.56	15
150	76	1.56	15
180	91	1.56	15

## Technical Data

### Physical

Property	Test Method	Typical Performance
Tensile Strength	ASTM D2671	10.4MPa
Elongation(%)	ASTM D2671	200%
Tensile Strength after Heat aging	UL 224 158°C X 168hrs	≥7.3
Elongation after Heat aging	UL 224 158°C X 168hrs	≥100
Heat shock	UL 224 250°C X 4hrs	NO dripping NO cracking

### Electrical

Property	Test Method	Typical Performance
Dielectric Strength	IEC 243	≥15kv/mm
Volume Resistivity	IEC 93	≥1×10 <sup>14</sup> Ω • cm

### Chemical

Property	Test Method	Typical Performance
Corrosion Action	UL 224 158°C X 168hrs	≥15kv/mm
Copper Compatibility	UL 224 158°C X 168hrs	PASS