

## Halogen Free Flame-retardant Heat Shrinkable Tube



### Model Number: SBD-SWHF

Working temperature: -55°C ~ 125°C

### Structure

Halogen free flame-retardant heat shrinkable tube is made of eco-friendly cross-linking polyolefin material under irradiation. It has environment-friendly, flexible, flame retardant, quick shrink and stable performances. Also, it has electrical insulation, welding point anticorrosion and antirust and mechanical performances. It has passed UL, RoHS, Reach certifications for 300V and 600V.

### Usage




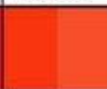







It is mainly used in electronics, telecommunication, automobiles,

shipping and other manufacturing industries.

### Characteristics

1. Halogen free, non-smoke, non-toxic, flame-retardant, soft, quick shrink, stable performance
2. Shrink ratio: 2:1
3. Shrink temperature: 84°C ~ 120°C

**Table 1: Color Reference**

Standard color and tolerance											
Color code	0	1	2	3	4		5	6	7	8	9
Color name	Bl	Br	R	Or	Y		G	Blu	V	Gr	W
	<b>Black</b>	<b>Brown</b>	<b>Red</b>	<b>Orange</b>	<b>Dark Yellow</b>	<b>Light Yellow</b>	<b>Green</b>	<b>Blue</b>	<b>Violet</b>	<b>Grey</b>	<b>White</b>
PANTONE color tolerance	419U 426U	4995U 5005U	7423U 7424U	1635U 1645U	107U 108U	1205U 1215U	346U 347U	7461U 7462U	2665U Violet U	424U 425U	Wh≥86%
											

**Table 2: Specification**

Property	Unit	Test Method	Standard
Tensile Strength	MPA	≥10.4(before aging)	ASTM D 2671
		≥7.3(after aging)	158°C*168h
Breakage Elongation (%)	%	≥200(before aging)	ASTM D 2671
		≥100(after aging)	158°C*168h
Heat Shock	-	no sticking & no cracking	UL 224, 250°C*4h
Cold Blend	-	no cracking	-30°C*4h
Breakdown Strength	KV/mm	≥15	ASTM D 149
Dielectric	600V	-	UL 224
			no breakdown for 2500V, 60s

Withstand	300V	-	UL 224	no breakdown for 1500V,60s
Volume Resistivity		Ω. cm	≥1×10 <sup>14</sup>	IEC 60093
Corrosion Performance		-	UL 224	158°C*168h
Copper Stability		-	UL 224	158°C*168h
Flammability		-	UL 224	VW-1

**Table3: Dimension**

1) Halogen Free Flame-retardant Heat Shrinkable Tube(600V)

Inner Diameter	As Supplied (mm)	After Recovery(mm)		Standard Package	Application Range(mm)
	Inner Diameter	Inner Diameter	Wall Thickness	(m/spool)	
Φ0.6	0.9±0.2	≤0.40	0.33±0.10	200	0.4~0.7
Φ0.8	1.1±0.2	≤0.50	0.33±0.10	200	0.6~0.8
Φ1.0	1.5±0.2	≤0.65	0.36±0.10	200	0.75~0.9
Φ1.5	2.0±0.2	≤0.85	0.36±0.10	200	0.95~1.4
Φ2.0	2.5±0.2	≤1.00	0.45±0.10	200	1.1~1.8
Φ2.5	3.0±0.2	≤1.30	0.45±0.10	200	1.35~2.3
Φ3.0	3.5±0.2	≤1.50	0.45±0.10	200	1.6~2.7
Φ3.5	4.0±0.2	≤1.80	0.45±0.10	200	1.85~3.2
Φ4.0	4.5±0.2	≤2.00	0.45±0.10	200	2.1~3.6
Φ4.5	5.0±0.2	≤2.30	0.56±0.10	100	2.35~4.0
Φ5.0	5.5±0.2	≤2.50	0.56±0.10	100	2.6~4.5
Φ5.5	6.0±0.2	≤2.75	0.56±0.10	100	2.85~5.0
Φ6.0	6.5±0.2	≤3.00	0.56±0.10	100	3.1~5.4
Φ7.0	7.5±0.3	≤3.50	0.56±0.10	100	3.7~6.3
Φ8.0	8.5±0.3	≤4.00	0.56±0.10	100	4.2~7.2
Φ9.0	9.5±0.3	≤4.50	0.56±0.10	100	4.7~8.0
Φ10	10.5±0.3	≤5.00	0.56±0.10	100	5.2~9.0
Φ11	11.5±0.3	≤5.50	0.56±0.10	100	5.7~10
Φ12	12.5±0.3	≤6.00	0.56±0.10	100	6.2~11
Φ13	13.5±0.3	≤6.50	0.56±0.10	100	6.7~12
Φ14	14.5±0.3	≤7.00	0.70±0.10	100	7.3~13
Φ15	15.5±0.4	≤7.50	0.70±0.10	100	7.8~14
Φ16	16.5±0.4	≤8.00	0.70±0.10	100	8.3~15
Φ17	17.5±0.4	≤8.50	0.70±0.10	100	8.8~16
Φ18	19.0±0.5	≤9.00	0.70±0.10	100	9.3~17
Φ20	22.0±0.5	≤10.00	0.83±0.15	100	10.4~19
Φ22	24.0±0.5	≤11.00	0.83±0.15	100	11.4~21
Φ25	26.0±0.5	≤12.50	0.90±0.15	50	12.8~24
Φ28	29.0±0.5	≤14.00	0.90±0.15	50	14.4~29
Φ30	31.5±1.0	≤15.00	1.00±0.15	50	16~29
Φ35	36.5±1.0	≤17.50	1.00±0.15	50	18~34
Φ40	41.5±1.0	≤20.00	1.00±0.15	50	21~39
Φ45	46.5±1.0	≤22.5	1.00±0.15	25	23.5~44
Φ50	≥50	≤25.0	1.10±0.15	25	26~49
Φ60	≥60	≤30.0	1.20±0.15	25	35~55
Φ70	≥70	≤35.0	1.30±0.20	25	40~65
Φ80	≥80	≤40.0	1.30±0.20	25	45~75
Φ90	≥90	≤45.0	1.30±0.20	25	50~85
Φ100	≥100	≤50.0	1.30±0.20	25	55~95
Φ120	≥120	≤60.0	1.30±0.20	25	65~115

Φ150	≥150	≤75.0	1.30±0.20	25	80~145
Φ180	≥180	≤90.0	1.30±0.30	25	95~175
Φ210	≥210	≤105.0	1.30±0.30	25	110~205
Φ230	≥230	≤115.0	1.30±0.30	25	120~225
Φ250	≥250	≤125.0	1.30±0.30	25	130~240

2) Halogen Free Flame-retardant Ultra Thin Heat Shrinkable Tube(300V)

Inner Diameter	As Supplied(mm)	After Recovery(mm)		Package (m/spool)	Application Range (mm)
	Inner Diameter	Inner Diameter	Wall Thickness		
Φ0.6CB	0.9±0.2	≤0.40	0.20±0.10	200	0.4~0.7
Φ0.8CB	1.0±0.2	≤0.50	0.20±0.10	200	0.6~0.8
Φ1.0CB	1.40±0.20	≤0.65	0.20±0.10	200	0.7~1.0
Φ1.5CB	1.90±0.20	≤0.85	0.20±0.10	200	0.9~1.4
Φ2.0CB	2.40±0.20	≤1.00	0.22±0.10	200	1.1~1.8
Φ2.5CB	2.90±0.20	≤1.30	0.25±0.10	200	1.4~2.3
Φ3.0CB	3.40±0.20	≤1.50	0.28±0.10	200	1.6~2.7
Φ3.5CB	3.90±0.20	≤1.80	0.28±0.10	200	1.9~2.3
Φ4.0CB	4.40±0.20	≤2.00	0.30±0.10	200	2.1~3.6
Φ4.5CB	4.90±0.20	≤2.30	0.30±0.10	100	2.4~4.0
Φ5.0CB	5.50±0.20	≤2.50	0.32±0.10	100	2.6~4.5
Φ6.0CB	6.50±0.20	≤3.00	0.32±0.10	100	3.1~5.4
Φ7.0CB	7.50±0.30	≤3.50	0.32±0.10	100	3.7~6.3
Φ8.0CB	8.50±0.30	≤4.00	0.32±0.10	100	4.2~7.2
Φ9.0CB	9.50±0.30	≤4.50	0.35±0.10	100	4.7~8.0
Φ10CB	10.50±0.30	≤5.00	0.35±0.10	100	5.2~9.0
Φ11CB	11.50±0.30	≤5.50	0.40±0.10	100	5.7~10.0
Φ12CB	12.50±0.30	≤6.00	0.40±0.10	100	6.2~11.0
Φ13CB	13.50±0.30	≤6.50	0.40±0.10	100	6.7~12.0
Φ14CB	14.50±0.30	≤7.00	0.40±0.10	100	7.3~13.0
Φ15CB	15.50±0.40	≤7.50	0.40±0.10	100	7.8~14.0
Φ16CB	16.50±0.40	≤8.00	0.40±0.10	100	8.3~15.0
Φ17CB	17.50±0.40	≤8.50	0.40±0.10	100	8.8~16.0
Φ18CB	18.50±0.40	≤9.00	0.42±0.10	100	9.3~17.0
Φ20CB	20.50±0.50	≤10.0	0.45±0.10	100	10.5~19.0
Φ22CB	22.50±0.50	≤11.0	0.45±0.10	100	11.4~21
Φ25CB	25.50±0.50	≤12.5	0.45±0.10	50	12.8~24
Φ28CB	28.50±0.50	≤14.0	0.45±0.10	50	14.4~29

**Color:** Standard color is black (other color available upon request).