TECHNICAL DATA

Flexible Heat Shrinkable Polyolefi Tubing

Halogen-Free **Product Code: 2S1(600V)** 2S2 (300V)

P. LEO & CO LTD

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Safety Standard: UL224 VW-1, C-UL CSA C 22.2 OFT

Product No.: 2S1yy-xx.x 2S2yy-xx.x (yy - represents color of the tube e.g. BK=Black WH=White YE=Yellow

RD=Red GR=Green BL= Blue; xx.x - represents expanded ID from 1mm x 50mm)



FL UL FILE #E176865

Product Introduction: 2S1 & 2S2 Halogen Free Heat Shrinkable Tube is newly developed environmental-friendly flame retardant heat shrinkable tube, using specially designed formulation of high polymers, through cross-link by electric accelerator and continuous expansion. The properties of environment-friendly, flexibility flame retardant, quick shrink and stable performance make them widely used in the field of electronics, communication, automobile, and widely applied for connecting or end-handing, electric wire, insulating and harness of electric wire corrosion and rust -proof of metallic rods or tubes, antenna protection and marking for other products.

Characteristics:

- 1. Do not contain four heavy metal elements and four halogen elements. Pass in SGS test.
- Do not contain organic stannum compound. Asbestos, Azo Compounds and Formaldehyde.
- Operating Temperature: -55 $^{\circ}$ C \sim 125 $^{\circ}$ C
- 4. Shrinking Temperature: Start at 70 $^{\circ}$ C, and full recovery at 110 $^{\circ}$ C (for thin wall), longitudinal shrink ration: \leq 8%
- 5. Flexible, flame retardant
- The Available sizes from \emptyset 0.6 \sim \emptyset 180mm, can produce upon customer's special requirement.
- 7. Easy for use oven or heating gun and it will shrink.
- 8. Meet Sony and RoHS environmental standard
- Available in standard colors: Black, White, Red, Yellow, Green, Blue are the basic colors. Other colors are not kept as stock. Need to produce.

Property:

Physical property	Property		Test Method	Typical Performance	
	Tensile Strength (MPa)		ASTM D2671	≥10.4	
	Elongation (%)		ASTM D2671	≥200	
	Tensile Strength after		UL224	≥7.3	
	heat aging (Mpa)		158°C x 168hr		
	Elongation after heat aging (%)		UL224	≥100	
			158°C x 168hr		
	Heat shock resistance		UL224	No dripping	
			250°C x 4hr	No cracking	
Electrical property	Dielectric strength		IEC 243	≥15 KV/mm	
	Pressure resistance	300V	UL224	1500V No cracking	
		600V	UL224	2500V No cracking	
	Volume resistance (Ω.cm)		IEC 93	$> 1 \text{ x } 10^{14} \Omega^* \text{cm}$	
Chemical property	Corrosion Action		UL224	PASS	
			158°C x 168hr		
	Copper Compatibility		UL224	PASS	
			158°C x 168hr		
	Flammability		UL224	VW-1	

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Environmental Property

Dimensions

Dimensions								
SIZE		AS SUPPLIED	AFTER R	STANDARD PACKAGE				
Inch	mm	INTERNAL DIAMETER mm	INTERNAL DIAMETER MAX	WALL THICKNESS NOM	SPOOL LENGTH M/Spool			
			mm	mm	-			
3/64	0.8	1.1±0.2	0.50	0.22	200			
1/16	1.0	1.5±0.2	0.65	0.28	200			
	1.5	2.0±0.2	0.85	0.32	200			
3/32	2.0	2.5±0.2	1.00	0.35	200			
	2.5	3.0±0.2	1.30	0.38	200			
1/8	3.0	3.5±0.2	1.50	0.40	200			
	3.5	4.0±0.2	1.80	0.42	200			
	4.0	4.5±0.2	2.00	0.45	200			
3/16	4.5	5.0±0.2	2.30	0.50	200			
	5.0	5.5±0.2	2.5	0.55	100			
1/4	6.0	6.5±0.2	3.0	0.55	100			
5/16	7.0	7.5±0.3	3.5	0.55	100			
	8.0	8.5±0.3	4.0	0.60	100			
3/8	9.0	9.5±0.3	4.5	0.60	100			
	10.0	10.5±0.3	5.0	0.60	100			
	11.0	11.5±0.3	5.5	0.60	100			
1/2	12.0	12.5±0.3	6.0	0.60	100			
	13.0	13.5±0.3	6.5	0.65	100			
	14.0	14.5±0.3	7.0	0.65	100			
5/8	15.0	15.5±0.4	7.5	0.70	100			
	16.0	16.5±0.4	8.0	0.70	100			
2/4	17.0	17.5±0.4	8.5	0.70	100			
3/4	18.0	19.0±0.5	9.0	0.80	100			
	20.0	21.0±0.5	10.0	0.80	100			
	22.0	23.0±0.5	11.0	0.80	100			
	25.0 28.0	26.0±0.5	12.5 14.0	0.90	50 50			
1-1/4	30.0	29.0±0.5 31.5±1.0	15.0	0.90 0.95	50			
	35.0	36.5±1.0	17.5	1.00	50			
1-1/2	40.0	41.5±1.0	20.0	1.00	50			
	45.0	46.5±1.0	22.5	1.00	25			
2	50.0	±0.3±1.0 ≥50	25.0	1.00	25			
2	60.0	≥60	31.0	1.30	25			
2	70.0	≥70	36.0	1.30	25			
3	80.0	≥80	41.0	1.46	25			
	90.0	≧90	46.0	1.46	25			
4	100.0	≥100	51.0	1.46	25			
5	120.0	≥120	61.0	1.56	25			
6	150.0	≧150	76.0	1.56	25			
7	180.0	≥180	91.0	1.56	25			

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