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TECHINICAL DATA SHEET

FOR

(HEAT SHRINKABLE TUBING)

φ 0.6-100.0 MM

(SHRINK RATIO: 2:1/3:1)



Material:

Heat shrink tube is flame retardant tube. The main material is polyolefin. The specific composition:

The environmental management material such as Pb, Cd, Hg, hexavalent chromium, PBB, PBDE etc. are accord with the SONY-000259 and EU-RoHS.

Usage:

Halogen-free flame retardant heat shrinkable tube is composed of radiating crosslinked polyolefin materials, mainly used for insulation of joints, rust protection of solder joints, mechanical wire harness protection, widely used in electronics, automobiles, communications, ships, aircraft and other manufacturing industries

CHARACTERS

Material:	Crosslinking polyethylene hydrocarbon
Property:	flame retardant, soft, insulation, shrink at low temperature
Shrink ratio:	2:1
longitudinal shrinkage ratio:	≤5%
Starting shrinkage temperature:	≥84℃
End shrinkage temperature:	≥120℃
Operating temperature:	-55℃~125℃

PROPERTIES

Properties	Condition	Value
Physical: Tensile strength		≥10.4Mpa
Elongation		≥200%
Tensile strength after aging		≥70% of original
Elongation after aging		≥100%
Heat shock	158±1℃, 168hr	No cracking
Cold bend	-55℃, 4hr	No cracking
Electrical: Dielectric Voltage withstand	60sec	≥2500V ≥10 Ω·cm Elongation ≥100% Pass
Volume resistivity	158±1℃, 168hr	
Chemical: Copper stability	158±1℃, 168hr	
Flammability	VW-1 OFT	
Voltage rating	600V/300V	
Temperature rating	125℃	

Standard wall heat shrink tube’s size (600Volt)

Specification (mm)	Sizes before shrink(mm)		Sizes after shrink(mm)		Package
	ID	Wall thickness	ID	Wall thickness	m/roll
Φ0.6	0.8±0.2	0.10±0.08	≤0.35	0.26±0.06	200±2
Φ0.7	0.9±0.2	0.15±0.08	≤0.4	0.30±0.06	200±2
Φ0.8	1.3±0.2	0.15±0.08	≤0.45	0.33±0.06	200±2
Φ1.0	1.5±0.2	0.18±0.08	≤0.6	0.36±0.06	200±2
Φ1.5	2.0±0.2	0.20±0.08	≤0.8	0.40±0.08	200±2
Φ2.0	2.5±0.2	0.20±0.08	≤1.00	0.42±0.08	200±2
Φ2.5	3.0±0.2	0.22±0.08	≤1.25	0.42±0.08	200±2
Φ3.0	3.5±0.3	0.25±0.10	≤1.5	0.46±0.08	200±2
Φ3.5	4.0±0.3	0.25±0.10	≤1.75	0.46±0.08	200±2
Φ4.0	4.5±0.3	0.25±0.10	≤2.0	0.48±0.08	200±2
Φ4.5	5.0±0.3	0.25±0.10	≤2.25	0.50±0.10	200±2
Φ5.0	5.5±0.4	0.25±0.10	≤2.5	0.50±0.10	100±1
Φ6.0	6.5±0.4	0.28±0.12	≤3.0	0.56±0.10	100±1
Φ6.5	7.0±0.4	0.30±0.12	≤3.25	0.56±0.10	100±1
Φ7.0	7.5±0.4	0.30±0.12	≤3.5	0.58±0.10	100±1
Φ8.0	8.5±0.5	0.30±0.12	≤4.0	0.60±0.10	100±1
Φ9.0	9.5±0.5	0.30±0.12	≤4.5	0.60±0.10	100±1
Φ10	10.5±0.5	0.30±0.12	≤5.0	0.60±0.10	100±1
Φ11	11.5±0.5	0.30±0.12	≤5.5	0.60±0.10	100±1
Φ12	12.5±0.5	0.30±0.12	≤6.0	0.60±0.10	100±1
Φ13	13.5±0.5	0.36±0.12	≤6.5	0.65±0.12	100±1
Φ14	14.5±0.5	0.36±0.12	≤7.0	0.65±0.12	100±1
Φ15	15.5±0.5	0.36±0.12	≤7.5	0.65±0.12	100±1
Φ16	16.5±0.5	0.36±0.12	≤8.0	0.65±0.12	50±0.5
Φ17	17.5±0.5	0.36±0.12	≤8.5	0.65±0.12	50±0.5
Φ18	18.7±0.6	0.40±0.15	≤9.0	0.70±0.12	50±0.5
Φ20	20.6±0.6	0.40±0.15	≤10.0	0.75±0.15	50±0.5
Φ22	22.7±0.6	0.40±0.15	≤11.0	0.80±0.15	50±0.5
Φ25	25.5±0.7	0.40±0.15	≤12.5	0.90±0.15	50±0.5
Φ28	29.0±0.7	0.45±0.20	≤14.0	0.95±0.15	50±0.5
Φ30	31.0±0.7	0.45±0.20	≤15.0	0.95±0.15	50±0.5
Φ35	36.0±1.0	0.50±0.22	≤17.5	1.00±0.20	50±0.5
Φ40	41.0±1.0	0.55±0.25	≤20.0	1.10±0.25	50±0.5
Φ45	46.0±1.0	0.55±0.25	≤22.5	1.10±0.25	50±0.5
Φ50	51.5±1.5	0.60±0.25	≤26.0	1.20±0.25	50±0.5
Φ55	≥55	0.60±0.25	≤28.0	1.20±0.25	50±0.5
Φ60	≥60	0.60±0.25	≤30.0	1.20±0.25	50±0.5
Φ70	≥70	0.70±0.30	≤35.0	1.45±0.25	50±0.5
Φ80	≥80	0.70±0.30	≤40.0	1.45±0.25	50±0.5
Φ95	≥95	0.70±0.30	≤45.0	1.45±0.25	50±0.5
Φ100	≥100	0.70±0.30	≤50.0	1.45±0.25	50±0.5

image:



Thin wall heat shrink tube’s size (300Volt)

Specification (mm)	Sizes before shrink(mm)		Sizes after shrink(mm)		Package
	ID	Wall thickness	ID	Wall thickness	m/roll
Φ0.6	0.8±0.2	0.12±0.06	≤0.35	0.25±0.06	200±2
Φ0.7	0.9±0.2	0.12±0.06	≤0.4	0.25±0.06	200±2
Φ0.8	1.3±0.2	0.10±0.05	≤0.45	0.25±0.06	200±2
Φ1.0	1.5±0.2	0.10±0.05	≤0.6	0.25±0.06	200±2
Φ1.5	2.0±0.2	0.10±0.05	≤0.8	0.25±0.06	200±2
Φ2.0	2.5±0.2	0.13±0.06	≤1.00	0.28±0.06	200±2
Φ2.5	3.0±0.2	0.15±0.06	≤1.25	0.28±0.06	200±2
Φ3.0	3.5±0.3	0.15±0.06	≤1.5	0.30±0.06	200±2
Φ3.5	4.0±0.3	0.15±0.06	≤1.75	0.30±0.06	200±2
Φ4.0	4.5±0.3	0.15±0.06	≤2.0	0.30±0.06	200±2
Φ4.5	5.0±0.3	0.15±0.06	≤2.25	0.30±0.06	200±2
Φ5.0	5.5±0.4	0.15±0.06	≤2.5	0.30±0.06	100±1
Φ6.0	6.5±0.4	0.15±0.06	≤3.0	0.30±0.06	100±1
Φ7.0	7.5±0.4	0.18±0.08	≤3.5	0.36±0.08	100±1
Φ8.0	8.5±0.5	0.18±0.08	≤4.0	0.36±0.08	100±1
Φ9.0	9.5±0.5	0.18±0.08	≤4.5	0.36±0.08	100±1
Φ10	10.5±0.5	0.18±0.08	≤5.0	0.36±0.08	100±1
Φ11	11.5±0.5	0.18±0.08	≤5.5	0.36±0.08	100±1
Φ12	12.5±0.5	0.18±0.08	≤6.0	0.36±0.08	100±1
Φ13	13.5±0.5	0.20±0.08	≤6.5	0.40±0.10	100±1
Φ14	14.5±0.5	0.20±0.08	≤7.0	0.40±0.10	100±1
Φ15	15.5±0.5	0.20±0.08	≤7.5	0.40±0.10	100±1

Shrink ratio:3:1

Specification (mm)	Sizes before shrink(mm)	Sizes after shrink(mm)		Package (m/roll)
	ID	ID	Wall thickness	
1.5/0.5	≥1.50	≤0.5	0.45±0.10	200
3.0/1.0	≥3.0	≤1.0	0.55±0.10	200
4.5/1.5	≥4.50	≤1.5	0.60±0.10	100
6.0/2.0	≥6.0	≤2.0	0.65±0.10	100
9.0/3.0	≥9.0	≤3.0	0.75±0.15	50
12.0/4.0	≥12.0	≤4.0	0.75±0.15	50
15.0/5.0	≥15.0	≤5.0	0.80±0.15	50
18.0/6.0	≥18.0	≤6.0	0.85±0.15	50
24.0/8.0	≥24.0	≤8.0	1.0±0.20	25
30.0/10.0	≥30.0	≤10.0	1.15±0.20	25
39.0/13.0	≥39.0	≤13.0	1.50±0.20	25
50.0/16.0	≥50.0	≤16.0	2.50±0.20	25
60.0/20.0	≥60.0	≤20.0	2.60±0.20	25
70.0/23.0	≥70.0	≤23.0	2.60±0.20	25
80.0/26.0	≥80.0	≤26.0	2.60±0.20	25
90.0/30.0	≥90.0	≤30.0	2.60±0.20	25
100.0/33.0	≥100.0	≤33.0	2.60±0.20	25

Black heat shrink tube:

Material			purpose	content	CAS No.
chinese	english	molecular formula			
乙烯酯酸乙alkene	EVA	$(CH_2-CH_2)_m$	main	50%	24937-78-8
		$-(CH_2-CH-COOCH_3)_n$			
magnesium hydrate	MH	$Mg(OH)_2$	fire retardant	40%	1309-42-8
FR-P	MP	$P_mN_nH_xO_y$	fire retardant	6%	7723-14-0
carbon black	C	C	carbon black	4%	1333-86-4

Colored heat shrink tube:

Material			purpose	content	CAS NO.
chinese	english	molecular formula			
乙烯酯酸乙,烯酯	EVA	$(CH_2-CH_2)_m-(CH_2-CH-COOCH_3)_n$	main	0.46	24937-78-7
magnesium hydrate	ATH	$Mg(OH)_2$	fire retardant	0.35	1309-42-8
FR-P	NM	$N_mH_xO_y$	fire retardant	0.14	
Four seasons amyl alcohol ester	Anti-oxide	$C_{73}H_{108}O_{12}$	antioxygen	0.01	

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