



SBRS-135G (3X) (4X)GF

Military Grade Highly Flame Retardant Adhesive-lined Heat Shrink Tubing



Description

SBRS-135G (3X)(4X)GF is a cross-linked polyolefin tube that is extruded with an inner layer of adhesive. The inner layer of adhesive, with superior sealing capability, is also a buffer against mechanical strain. Dual wall heat shrink tubing is designed to provide superior sealing against water, corrosive gas and chemicals. Typical applications include environmental sealing of in-line splices, sealing and strain relief of connectors and terminals, abrasion protection and electrical insulation of automotive wiring harness splices and valuable components, fleet & marine sealing & protection and wire bundling etc.

Features

- Standard: AMS-DTL-23053/4 UL 224
- Shrink ratio:3:1,4:1
- High flame retardant, environment friendly, UV resistant
- Shrink temperature:70°C ~125°C
- Continuous operating temperature:-45°C ~135°C
- RoHS compliant
- Standard color: Black outside. White inside



Technical Performance

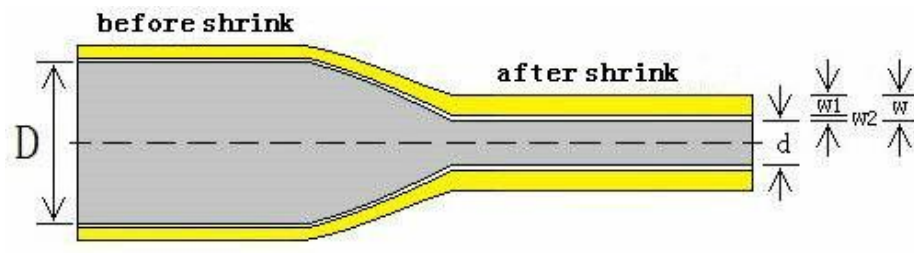
Property	Typical Data	Test Method/Condition
Tensile Strength	≥12MPa	ASTM D 2671
Elongation at break	≥300%	ASTM D 2671
Tensile strength after heat aging	≧ 8.4MPa	175°C×168h
Elongation after heat aging	≥100%	175°C×168h
Longitudinal change	-8%~+8%	ASTM D 2671
Flammability	Self extinguishing in 30 sec.	AMS-DTL-23053/4
Heat Shock	No breakdown , no dripping	UL 224,250°C×4h
Dielectric strength	≥ Flammability AMS-DTL-2305 15kV/m 3/4 m	IEC Flammability AMS-DTL-2305 6024 3 3/4
Volume resistivity	≥10 ¹⁴ Ω.cm	IEC 60093



Technical Performance of Adhesive

Property	Typical data	Test method/condition
Softening point	95±5°C	ASTM E 28
Water absorption	<0.5%	ASTM D 570
Peel strength(PE)	≥120N/25mm	ASTM D 1000
Peel strength(Al)	≥80N/25mm	ASTM D 1000

Structure





Dimensions (3:1)

Size		As supplied D(mm)	After full recovery(mm)			Standard package
mm	inch		ID	Wall thickness	Thickness of adhesive	(m/spool, m/pc)
Φ3.2	1/8	≥3.2	≤1.00	0.90±0.15	0.35±0.10	200
Φ4.8	3/16	≥4.8	≤1.60	1.00±0.15	0.40±0.10	100
Φ6.4	1/4	≥6.4	≤2.20	1.25±0.15	0.45±0.12	100
Φ7.9	5/16	≥7.9	≤2.70	1.30±0.15	0.50±0.12	100
Φ9.5	3/8	≥9.5	≤3.20	1.40±0.15	0.50±0.12	50
Φ12.7	1/2	≥12.7	≤4.20	1.70±0.15	0.50±0.12	25
Φ15.0	5/8	≥15.0	≤5.20	1.80±0.15	0.55±0.15	25
Φ19.1	3/4	≥19.1	≤6.30	1.95±0.15	0.55±0.15	25
Φ25.4	1	≥25.4	≤8.50	2.05±0.20	0.55±0.15	25
Φ30.0	1-1/4	≥30.0	≤10.20	2.20±0.20	0.60±0.15	1.22
Φ39.0	1-1/2	≥39.0	≤13.50	2.50±0.20	0.60±0.15	1.22
Φ50.0	2	≥50.0	≤17.00	2.80±0.25	0.70±0.15	1.22



Dimensions (4:1)

Size		As supplied D(mm)	After full recovery(mm)			Standard package
mm	inch		ID	Wall thickness	Thickness of adhesive	(m/spool, m/pc)
Φ4.0	2/13	≥4.0	≤1.0	1.05±0.30	0.50±0.20	200
Φ6.0	1/4	≥6.0	≤1.5	1.15±0.30	0.50±0.20	100
Φ8.0	5/16	≥8.0	≤2.0	1.55±0.30	0.60±0.25	100
Φ12.0	1/2	≥12.0	≤3.0	1.75±0.30	0.60±0.25	25
Φ16.0	5/8	≥16.0	≤4.0	2.00±0.35	0.70±0.30	25
Φ20.0	4/5	≥20.0	≤5.0	2.30±0.40	0.70±0.30	25
Φ24.0	1	≥24.0	≤6.0	2.60±0.40	0.75±0.30	25
Φ32.0	1-1/4	≥32.0	≤8.0	3.00±0.50	0.90±0.30	1.22
Φ52.0	2	≥52.0	≤13.0	3.35±0.50	0.95±0.30	1.22

Note: Non standard dimensions and package are available on request