

[Dual wall, flame-retarded heat-shrinkable tubing with meltable adhesive for waterproofing of irregular-shaped objects]
SAE/UL/CSA recognized

Catalog No. 891 ✓ RoHS directive 10 substances

Waterproofing Flame-retarded UL recognized CSA recognized



Basic Properties

- Material : Outer : Irradiated cross-linked flexible flame-retarded polyolefin
: Inner : Meltable adhesive
- Shrink temperature : min. 110°C
- Shrink ratio : Radial change : min. 60%
: Longitudinal change: -15 to 5%
- Continuous operating temperature : -55 to 125°C

Features

- SAE/UL/CSA recognized
- Watertight sealing with good adhesion to metals, polyolefin and PVC
- Flame-retarded (PBDE/PBB-free) ■ Flexible
- Thicker adhesive (than SUMITUBE™ O2B2)

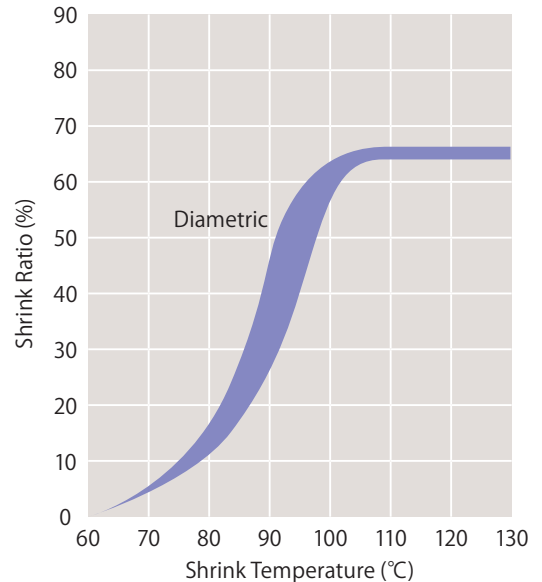
Specifications/Approvals

- SAE-AS23053/4 Class 3
UL224
File No. E75077
Catalog No. SUMITUBE™ W3B2 or 891
Rating temperature: 125°C Rating voltage: 600V
CSA C22.2 No. 198.1
File No. LR33298
Rating temperature: 125°C Rating voltage: 600V

Colors

- Black

Shrink Properties



Applications

- Waterproof sealing for electronic devices with irregular shapes or profiles
- Encapsulation for wire branches
- Insulation and protection for wire joints

Properties [SAE-AS23053/4 Class 3]

Properties	Items	Requirements	Typical values*1	
Mechanical	Tensile strength*2	min. 10.4MPa	14.4MPa	
	Elongation	min. 250%	472%	
	Cold impact	-55°C x 3 minutes, no crack	Pass	
	Heat shock	250°C x 4 hours, no crack	Pass	
Electrical	Dielectric strength	min. 11.8kV/mm	41.1kV/mm	
	Volume resistivity	min. 10 ¹⁴ Ω·cm	2.11 x 10 ¹⁵ Ω·cm	
Chemical	Water absorption	23°C x 24 hours, max. 1.0%	0.49%	
	Corrosion against bare copper	121°C x 16 hours, no corrosion	Pass	
	Color stability	175°C x 24 hours, no change	Pass	
	Fluid Resistance	After immersion in the fluids specified in SAE-AS23053 at 23°C for 24 hours,		
	Tensile strength	min. 6.2MPa	10.4MPa	
Dielectric strength	min. 7.9kV/mm	38.1kV/mm		
Flammability (UL224)	Flame-retarded, pass, all tubing flame test		Pass	

*1: For reference use only *2: Calculated by using outer cross section

Sizes

Trade size (mm)	As supplied (mm)		After recovered (mm)		Unit length (min.) (m)
	Inside diameter (min.)	Inside diameter (max.)	Wall thickness*3	Adhesive thickness (nom.)	
3/1	3.00	1.00	1.00 ± 0.30	0.50	1.22
6/2	6.1	2.00	1.00 ± 0.30	0.50	1.22
12/4	11.9	4.10	1.80 ± 0.40	0.80	1.22
24/8	23.9	8.1	2.50 ± 0.50	1.00	1.22
40/13	39.9	13.0	2.50 ± 0.50	1.00	1.22

*3: Including inner adhesive

A
C
A4
LA
C (UL)
D
A2

B
LB

F (Z)
F3 (Z)
NHR2
NHR4
V (300V)
V (600V)

F2 (Z)
F4 (Z)
B2
B2 (3X)
B8

K
K2

KH200 (TW)
KH230 (TW)

B6
R
AN25

W

O2C
W3C

O2B2
W3F2
W3B2
W3B2 (4X)
SA2
SA3

IRRAX™TUBE
IRRAX™TAPE

A
B
F2
F2 (UL)
V2
RP3
B8
ER2
NHR
FE2
VZL

IRRAX™SLEEVE

SCM2
SBI 300/350
SNHM

Composite articles

SUMISEAL
SUMITUBE SA3 CAP

Processing equipment

SUMISHRINKER / HEATING GUN