

# SUMITUBE™ W3B2 (4X)

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

Catalog No. 891 ✓ RoHS directive 10 substances

Waterproofing Flame-retarded UL recognized CSA recognized



SUMITUBE™

A  
C  
A4  
SUMITUBE LA  
C (UL)  
D  
A2

SUMITUBE B  
LB

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

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

SUMITUBE K  
K2

SUMITUBE KH200 (TW)  
SUMITUBE KH230 (TW)

B6  
SUMITUBE R  
AN25

SUMITUBE W

SUMITUBE O2C  
W3C

O2B2  
W3F2  
SUMITUBE W3B2  
W3B2 (4X)  
SA2  
SA3

IRRAX™TUBE  
IRRAX™TAPE

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

IRRAX™SLEEVE

SCM2  
IRRAXSLEEVE SBI  
300/350  
SNHM

Composite articles

SUMISEAL  
SUMITUBE SA3 CAP

Processing equipment

SUMISHRINKER / HEATING GUN

## Basic Properties

- Material : Outer : Irradiated cross-linked flexible flame-retarded polyolefin  
: Inner : Meltable adhesive
- Shrink temperature : min. 110°C
- Shrink ratio : Radial change : min. 80%  
: Longitudinal change: -15 to 5%
- Continuous operating temperature : -55 to 125°C

## Features

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

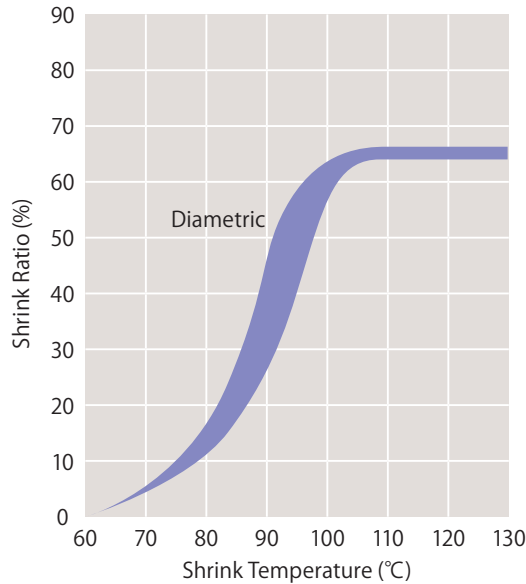
## Specifications/Approvals

- SAE-AS23053/4 Class 3  
UL224  
File No. E75077  
Catalog No. SUMITUBE™ W3B2 (4X) or 891  
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 Class3]

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 <sup>14</sup> Ω·cm	2.11 x 10 <sup>15</sup> 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 (nom.)	Adhesive thickness (nom.)	
4/1	4.00	1.00	1.00 ± 0.30	0.50	1.22
8/2	8.0	2.00	1.00 ± 0.30	0.50	1.22
16/4	16.0	4.00	1.80 ± 0.40	0.80	1.22
24/6	24.0	6.0	2.50 ± 0.50	1.00	1.22

\*3: Including inner adhesive