

Sumitube V (300V)

UL224 approved
Clear, flame-retardant,
heat-shrinkable tubing

Basic Properties

- 1) Materials : Flexible, flame-retardant, poly vinyl chloride resin
- 2) Shrink ratio (Radial change) : 50% min.
- 3) Longitudinal change : -30% min.
- 4) Continuous operating temperature : -30 to 105°C

Features & Benefits

- 1) Compliant with UL224
- 2) Flame-retardant
- 3) Clear

Specifications / Approvals

UL224

Efile No. : E48762

Catalogue No. : 818 (Inch sizes), 823 (Mili sizes)

Operating temperature : 105°C

Voltage rating : 300V

Flammability rating : VW-1

Electrical Appliance and Material Control Law
Optional Registration System of Compounds and
Materials

Registration of flammability rating (-F-)

Registration No. : F-ST3-001 to F-ST3-008)

Markings

The following letters are printed on the surface of
Sumitube V

◆ SUMITOMO SUMITUBE V 105°C VW-1 CAT

XXX -F- ()

XXX will indicate catalogue No..

Applications

- 1) Insulation, protection and reinforcement of terminations and joints of electric wires
- 2) Fixing and protection of cable labels
- 3) Insulation and protection of resistances and capacitors

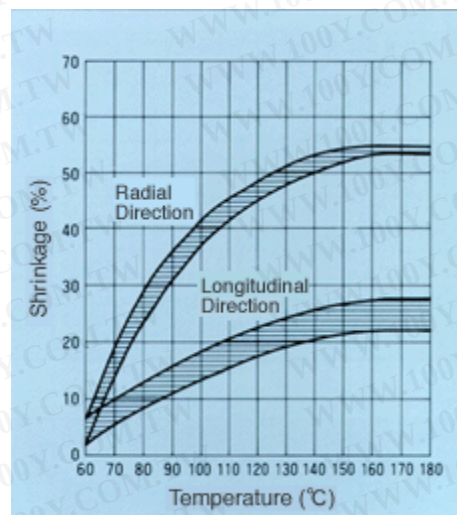
Colors

Standard colors : Clear

Properties [UL224]

Properties	Items	Requirements	Typical Values*
Mechanical	Tensile Strength (before aging)	10.3MPa{1.05kg/mm ² } min.	27.7MPa {2.82kg/mm ² }
	Tensile Strength (after aging)	136°C × 7 days, 7.3MPa{0.74kg/mm ² } min.	29.0MPa {2.96kg/mm ² }
	Ultimate Elongation (before aging)	100% min.	370%

Shrinkage-Temperature Curve



The above curve chart shows the shrink ratio in each direction. The shrink ratio in longitudinal direction should be indicated with negative sign. (ex. 15% → -15%)

勝特力材料 886-3-5753170
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Electrical	Ultimate Elongation (after aging)	136℃ × 7 days, 100% min.	340%
	Deformation	131℃ × 1 hour, 35% max.	27%
	Heat Shock	180℃ × 1 hour, No cracking	Pass
	Cold Bend	-30℃ × 1 hour, No cracking	Pass
	Dielectric Voltage Withstand (before aging)	AC2.5kV × 60sec., No breakdown	Pass
	Dielectric Voltage Withstand (after aging)	136℃ × 7 days, AC2.5kV × 60sec. No breakdown	Pass
	Dielectric Voltage Breakdown (before aging)	AC2.5kV min.	17.5kV
	Dielectric Voltage Breakdown (after aging)	136℃ × 7 days, Percent of original 50%, AC2.5kV min.	Pass
	Volume Resistivity	10 ¹⁰ Ω•cm min.	8.7 × 10 ¹² Ω•cm
	Copper Corrosion	After leaving for 24 hours at humidity 95% and temperature 23℃, 136℃ × 7 days, No corrosion	Pass
Chemical	Copper Stability	After leaving for 24 hours at humidity 95% and temperature 23℃, 136℃ × 7 days, 100% min.	300%
	Flammability	Flame-retardant (Pass VW-1)	Pass

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*Not guaranteed values

■ Sizes

Inch Sizes (Catalogue No. 818)

Nominal Size (inch)	As Supplied (mm)		After Full Recovery (mm)		Unit Length (m)
	Inside Diameter* (min.)	Wall Thickness	Inside Diameter (max.)	Wall Thickness (min.)	
3/64	1.20	0.10	0.60	0.26	100
1/16	1.60	0.10	0.80	0.33	100
3/32	2.40	0.12	1.20	0.33	100
1/8	3.20	0.12	1.60	0.33	100
3/16	4.80	0.12	2.40	0.33	100
1/4	6.4	0.15	3.20	0.44	50
3/8	9.5	0.15	4.80	0.44	50
1/2	12.7	0.19	6.4	0.56	50
3/4	19.1	0.23	9.5	0.69	50
1	25.4	0.25	12.7	0.77	50

Mili Sizes (Catalogue No. 823)

Nominal Size (mm)	As Supplied (mm)		After Full Recovery (mm)		Unit Length(m)
	Inside Diameter* (min.)	Wall Thickness	Inside Diameter (max.)	Wall Thickness (min.)	
1.5 × 0.15	1.50	0.15	0.75	0.33	100
2 × 0.15	2.00	0.15	1.00	0.33	100
2.5 × 0.15	2.50	0.15	1.25	0.33	100
3 × 0.15	3.00	0.15	1.50	0.33	100
3.5 × 0.15	3.50	0.15	1.75	0.33	100
4 × 0.15	4.00	0.15	2.00	0.33	100
5 × 0.15	5.00	0.15	2.50	0.44	50

6 × 0.15	6.0	0.15	3.00	0.44	50
7 × 0.15	7.0	0.15	3.50	0.44	50
8 × 0.15	8.0	0.15	4.00	0.44	50
9 × 0.2	9.0	0.20	4.50	0.56	50
10 × 0.2	10.0	0.20	5.00	0.56	50
11 × 0.2	11.0	0.20	5.50	0.56	50
12 × 0.2	12.0	0.20	6.0	0.56	50
13 × 0.25	13.0	0.25	6.5	0.69	50
14 × 0.25	14.0	0.25	7.0	0.69	50
15 × 0.25	15.0	0.25	7.5	0.69	50
16 × 0.25	16.0	0.25	8.0	0.69	50
18 × 0.25	18.0	0.25	9.0	0.77	50
20 × 0.25	20.0	0.25	10.0	0.77	50
22 × 0.25	22.0	0.25	11.0	0.77	50
25 × 0.25	25.0	0.25	12.5	0.77	50

*Each size of the inside diameter listed above is the minimum guaranteed size, but the actual size of each may be bigger by about 20%.

▲Caution!

All statements and technical information contained herein are based on tests we believe to be liable and only general properties are described. Therefore, safety of each specific application by the users should not be guaranteed. The users themselves should determine product conformance to your specific applications and assume all responsibility for all damages that may be caused directly or indirectly when using the products.

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