

**FLEXIBLE POLYOLEFIN THIN WALL
2 : 1 Shrink Ratio
PBDE - Free**

UL RECOGNIZED 125° C 300V (VW-1)



RoHS/RoHS2 Compliant

TYPICAL FEATURES

<p>1) Sumitube F4(Z) is a very flexible, thin wall, flame retarded, heat-shrinkable polyolefin tubing that is recognized by Underwriters' Laboratories (UL) Subject 224 as a VW-1 rated material.</p> <p>2) Low temperature recovery benefits the user in more rapid installation, with less potential for damage to component insulation systems. Thin recovered walls save space and weight.</p> <p>3) Shrink temperature is 90° C.</p>	<p>4) Operating temperature range is -55° C to +125° C.</p> <p>5) Sumitube F4(Z) is recommended for all general purpose applications for flame retardant tubing such as insulating, color coding, bundling or environmental protection, especially when space or weight is at a premium.</p> <p>6) Sumitube F4(Z) is a direct replacement for Sumitube F4.</p>
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STANDARD SIZES

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
3/64	.046	1.2	.023	0.6	.010	0.25
1/16	.063	1.6	.031	0.8	.010	0.25
3/32	.093	2.4	.046	1.2	.012	0.30
1/8	.125	3.2	.062	1.6	.012	0.30
3/16	.187	4.8	.093	2.4	.012	0.30
1/4	.250	6.4	.125	3.2	.014	0.36
3/8	.375	9.5	.187	4.8	.014	0.36
1/2	.500	12.7	.250	6.4	.014	0.36
3/4	.750	19.1	.375	9.5	.017	0.43
1	1.000	25.4	.500	12.7	.020	0.51
1 1/4	1.250	31.7	0.625	15.9	.020	0.51

Standard colors: Black, White, Red, Yellow
Other colors are available upon request

Standard package: Spooled (S)

How to Order: (Type of material) (Size) (Color) (Packaging)

Example: F4 (Z) 1/4 Black S

F 4 (Z) SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
Physical: Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex (-55°C) Heat resistance (158°C, 168 hrs.) Elongation (%) Secant modulus (psi) Deformation (125°C 1 hr.) (%) Longitudinal change (%)	UL 224 UL 224 ASTM D792 AMS-DTL-23053 UL 224 ASTM D882 UL 224 AMS-DTL-23053	1500 min.. 200 min. 1.35 max. no cracking 100 min. 25000 max. 50 max. -15 min.
Electrical: Dielectric withstand (volts) Volume resistivity (ohm-cm)	UL 224 UL 224	2500 min. 1.0 X 10 ¹⁴ min.
Chemical: Corrosion Copper stability (158°C 168 hrs.) Elongation (%) Water absorption (%) Flammability Shrink temperature, nominal	UL 224 UL 224 ASTM D570 UL 224 VW-1 ----	No corrosion 100 min. 0.5 max. pass 90°C

Specification reference: UL-224 125°C, 300V, VW-1
 File E48762 YDPU2, Cat. No. SUMITUBE F4(Z)
 CSA-C22.2 No. 198-M1999 125°C, 150V
 File LR33298

Marking: SUMITUBE F4(Z) is surface printed with recognized UL and CSA marking.



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Rev. 6/20/12