

ASTRATITE® TYPE VC TUBING

Class 105°C • Heat Shrinkable Polyvinylchloride Tubing
UL Recognized Component: Class 105°C, VW-1 File No. E31622
Canadian Standards Association: File No. 37065
M1L-I-23053/2, Class 2, ASTM D3150, Type I



DESCRIPTION

ASTRATITE Type VC tubing is a polyvinylchloride heat shrinkable tubing that will recover to half its original diameter when heated to 135°C or higher. During the shrinking operation, the tubing will encapsulate any device inside of it at the time and will assume the contour of that device. It is useful for skin-tight covering of splices, resistors, diodes, mechanical parts, terminations, antennas, etc.

The tubing is self-extinguishing when tested according to UL 224, Table 25.5 VW-1. The tubing is designed for chemical resistance, 105°C heat resistance, corrosion resistance and low temperature flexibility. Continuous operating range is -35°C to +105°C. ASTRATITE VC tubing conforms to MIL-I-23053/2. ASTRATITE VC tubing has the following characteristics when tested according to UL 224, Table 25-5.

PERFORMANCE CHARACTERISTICS

Property	Typical Value
Tensile Strength	3,000 psi
Elongation	250%
Dielectric Withstand	Pass 2000V/1 min
Heat Aging (7 days/136°C)	
Flexibility	No cracking
Tensile Strength	3,000 psi
Elongation	220%
Copper Corrosion	No discoloration
Copper Stability	200% elongation
Dielectric Strength	800 V/mil
Deformation (1 h / 121°C)	30% wall decrease
Heat Shock (1 h/121°C/20% Elong.)	No cracking
Cold Bend (1 h / -10°C)	No cracking
Flame Resistance (VW-1)	3 sec to extinguish
Volume Resistivity	10 ¹¹ ohm-cm
Longitudinal Change (3 Min. / 150°C) (After unrestricted recovery)	-15% typical, -20% Max.
Restricted Recovery	5,000 V
Shelf Life (90 Days / 70°F)	Meets I.D. requirement
Secant Modulus UL 224	19,500 psi
Specific Gravity	1.25



DIMENSIONS

Size	Minimum Expanded I.D.		Maximum Recovered I.D.		Nominal Recovered Wall	
	Inch	(mm)	Inch	(mm)	Inch	(mm)
3/64	.046	(1.17)	.023	(0.58)	.020	(0.51)
1/16	.063	(1.60)	.031	(0.79)	.020	(0.51)
3/32	.093	(2.36)	.046	(1.17)	.020	(0.51)
1/8	.125	(3.18)	.062	(1.60)	.025	(0.64)
3/16	.187	(4.75)	.093	(2.36)	.025	(0.64)
1/4	.250	(6.35)	.125	(3.18)	.025	(0.64)
5/16	.312	(7.92)	.156	(3.96)	.028	(0.71)
3/8	.375	(9.52)	.187	(4.75)	.030	(0.76)
1/2	.500	(12.70)	.250	(6.35)	.030	(0.76)
5/8	.625	(15.88)	.312	(7.92)	.035	(0.89)
3/4	.750	(19.05)	.375	(9.52)	.035	(0.89)
1	1.000	(25.40)	.500	(12.70)	.040	(1.02)
1 1/2	1.500	(38.10)	.750	(19.05)	.045	(1.14)
2	2.000	(50.80)	1.000	(25.40)	.050	(1.27)
2 1/2	2.500	(63.50)	1.250	(31.75)	.060	(1.52)
3	3.000	(76.20)	1.500	(38.10)	.060	(1.52)
4	4.000	(101.60)	2.000	(50.80)	.065	(1.65)

STANDARD PACKAGING

Spools of continuous lengths.
Cut to customer specifications.

STANDARD COLORS

3/64" - 1/16" Black
 3/32" - 1" Black, white, and clear
 1 1/2" - 4" Black
 Other colors available on special order.