

ASTRATITE® TYPE VC-TW TUBING

Class 105°C • Heat Shrinkable Polyvinylchloride Tubing

UL Recognized Component: Class 105°C, 600 Volt, VW-1, File No. E31622

MIL-I-23053/2, Class 2, Thin Wall



DESCRIPTION

ASTRATITE VC-TW tubing is a polyvinylchloride heat shrinkable tubing manufactured with a thin wall for use when the voltage is low and flexibility of the insulated part is required. The insulation is identical to ASTRATITE VC tubing, but wall thickness is less, providing improved flexibility. ASTRATITE VC-TW tubing recovers to approximately 40% of original diameter as opposed to 50% for the heavier-walled ASTRATITE VC tubing.

When recovered, ASTRATITE VC-TW tubing will exhibit less longitudinal shrinkage than competitive tubings. Shelf stability is generally greater than competitive tubings. When recovered on a part, it will conform to the contour of that part providing a skin-tight covering that will shield the part from dirt, moisture, or corrosive environments. Resistors, capacitors, bus bars and antenna parts can be covered by ASTRATITE VC-TW tubing. This tubing can also be used as protection for antenna load coils. Abrasion resistance and thermal stability are excellent.

ASTRATITE VC-TW tubing is manufactured to conform to Underwriters Laboratories UL 224 Standard for Safety: Extruded Thermoplastic Insulating Tubing, Table 25.5 and passes the VW-1 flammability test. It is recommended for continuous use up to 105°C. Recommended shrinking conditions are 135°C for 3 minutes. ASTRATITE VC-TW tubing has the following characteristics when tested according to UL 224, Table 25.5.

DIMENSIONS

Size	Minimum Expanded I.D.		Maximum Recovered I.D.		Nominal Wall Recovered	
	Inch	(mm)	Inch	(mm)	Inch	(mm)
1/16"	.063	(1.60)	.037	(0.94)	.014	(.356)
3/32"	.093	(2.36)	.055	(1.40)	.014	(.356)
1/8"	.125	(3.18)	.075	(1.91)	.014	(.356)
3/16"	.187	(4.75)	.110	(2.79)	.018	(.457)
1/4"	.250	(6.35)	.150	(3.81)	.022	(.558)
3/8"	.375	(9.52)	.225	(5.72)	.022	(.558)
1/2"	.500	(12.70)	.300	(7.62)	.022	(.558)
5/8"	.625	(15.88)	.375	(9.52)	.022	(.558)
3/4"	.750	(19.05)	.450	(11.43)	.022	(.558)

Other sizes available subject to factory quotation and acceptance.

PERFORMANCE CHARACTERISTICS

Property	Typical Value
Tensile Strength	3,000 psi
Elongation	250%
Dielectric Withstand	Pass 2000 V/1 min
Heat Aging (7 days/136°C)	
Flexibility	No cracking
Tensile Strength	3,000 psi
Elongation	220%
Copper Corrosion (mirror)	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)	-15% typical, -25% Max.
Restricted Recovery	5,000 V (breakdown)
Shelf Life (90 Days / 70°F)	Meets I.D. requirement
Secant Modulus UL 224	19,500 psi
Specific Gravity	1.25

PACKAGING

Spools of continuous lengths.
Cut to customer specifications.

STANDARD COLORS

Clear, Black.
Other colors available on special order.