

1/2" Plenum-Rated Coax Cable

UL E473791

Overview

SureCall's Plenum-rated cable is insulated with low smoke and low flame characteristics. Almost all large buildings utilize the ceiling for returning air to the AC unit, thereby making it a plenum ceiling which means all cables running through the ceiling needs to be plenum rated.



Construction Materials and Dimensions

	Material	Copper Clad Aluminum Wire
Inner Conductor	Diameter, in.	0.189
	Material	PE Spline
Dielectric	Diameter, in.	0.465
	Material	Ring Corrugated Copper
Outer Conductor	Diameter, in.	0.543
	Material	PVC, Plenum Rated
Jacket	Diameter, in.	0.629

Attenuation

Frequency	dB/100 ft	dB/100 m
10	0.21	0.67
100	0.67	2.19
200	0.96	3.15
450	1.48	4.85
800	2.03	6.65
900	2.15	7.07
1000	2.30	7.53
1500	2.88	9.46
1800	3.20	10.50
2000	3.40	11.16
2300	3.69	12.11
3000	4.36	14.16
6000	6.58	21.58

Electrical Specifications

Inner conductor DC resistance, Ω /kft	0.486
Outer conductor DC resistance, Ω /kft	0.689
Impedance, Ω	50 \pm 2
Inductance, μ H/ft	0.058
Capacitance, pF/ft	23
Propogations velocity, %	88
DC breakdown voltage, kV	6.0
Insulation resistance, $M\Omega$ km	>5X10 ³
Peak Power, kW	40
Screening attenuation, dB	>>120
Cut-off frequewncy, GHz	8.80

VSWR

806-960 MHz	1.15
1700-2400 MHz	1.15
5-3000 MHz	1.25

Mechanical Specifications

Bending radius, in.	Single	2.76
	Repeated	4.92
Tensile strength, lbs.		254
Crush resistance, lb/in.		80
Bending moment, ft lb.		11.4
Storage Temperature, °F		-4 \approx +185
Installation Temperature, °F		-40 \approx +140
Operating Temperature, °F		-67 \approx +185

Fire Retardant Properties

Meets UL 444, CATV/CMP, NFPA-262