

RF FEEDER CABLE 1/2" SUPERFLEX

1/2"S Low loss physical foamed insulation coaxial cable 50 Ohms corrugated copper tube series coaxial cable

RF 50 1/2"S

Description

1/2"S Standard Cable - PE	LTCB-03S
1/2"S Retardant Cable	LTCB-03S-RTD

Construction

Inner conductor	Material	Copper-clad aluminum wire or copper
	Diameter, mm(in)	3.55(0.14)
Dielectric	Material	Physical foam polyethylene
	Diameter, mm(in)	8.7(0.34)
Outer conductor	Material	Helical copper tube
	Diameter, mm(in)	12.0(0.47)
Jacket	Material	Black PE or low smoke halogen-free fire retardant
	Diameter, mm(in)	13.4(0.53)
Weight, kg/m(lb/ft)	LTCB-03S	0.20(0.14)
	LTCB-03S-RTD	0.22(0.18)

Mechanical properties

Bending radius, mm(in)	Single bend	15(0.6)
	Repeated bend	30(1.2)
Number of bend	15	
Mobile Apply, mm(in)	200(8)	
Bending Moment, N · m(lb-ft)	1.8(1.3)	
Tensile Strength, kg(lb)	65(146)	
Storage Temperature, °C(°F)	-55 to +85(-67 to +185)	
Installation Temperature, °C(°F)	-40 to +60(-40 to +140)	
Operating Temperature, °C(°F)	-55 to +85(-67 to +185)	

Electrical Properties

Capacitance, pF/m(ft)	80(24.4)
Impedance, ohms	50 ±2
Velocity, percent	83
Peak power rating, kW	19
RF peak voltage, KV	1.13
Insulating resistance, MΩ · km	>5000
Cut-off frequency, (GHz)	12.5
Insulation voltage, KV	2.5
Inner Conductor DC Resistance, Ω/km	2.85
Outer Conductor DC Resistance, Ω/km	3.5
Jacket Spark, KV	5
Shielding effectiveness, dB	>120
VSWR (Return loss)	
0.005-3GHz	≤1.15(≥23dB)
0.8-1.0GHz	≤1.10(≥26dB)
1.7-2.0GHz	≤1.10(≥26dB)
2.0-2.4GHz	≤1.10(≥26dB)



Frequency MHz	Max. Attenuation dB/100 ft	Max. Attenuation dB/100 m	Power Rate kW	Frequency MHz	Max. Attenuation dB/100 ft	Max. Attenuation dB/100 m	Power Rate kW
100	0.980	3.220	3.030	2000	5.000	16.400	0.590
200	1.420	4.650	2.110	2200	5.290	17.350	0.560
450	2.190	7.200	1.370	2400	5.520	18.100	0.530
800	3.010	9.860	1.000	2500	5.640	18.500	0.520
900	3.220	10.560	0.940	3000	6.370	20.900	0.480
1000	3.400	11.150	0.880	Standard Testing Condition			
1500	4.210	13.800	0.700	Attenuation : VSWR 1.0, Ambient Temperature 20°C			
1800	4.740	15.550	0.630	Average Power Rate : VSWR 1.0, Ambient Temperature 40°C			
				Inner Conductor Temperature 100°C, no solar radiation			