

SYNERGY TELECOM PVT. LTD

1/4" Super Flex Cable -

Construction Specifications	Material
Inner Conductor	Copper-Clad Aluminum Wire
Dielectric	Physical Foam Polyethylene
Outer Conductor	Helical Copper Tube
Jacket	Black PE

Physical Dimensions	
Inner Conductor Diameter, mm(in)	1.8 (0.075)
Dielectric Diameter, mm(in)	4.7 (0.185)
Outer Conductor Diameter, mm(in)	6.35 (0.250)
Over Jacket Diameter, mm(in)	7.6 (0.295)

Electrical Specifications	
Capacitance, pF/m(ft)	80 (24.4)
Impedance, ohms	50±2
Velocity, Percent	83
Peak Power Rating, kW	6.4
RF Peak Voltage, KV	0.80
Insulation Resistance, MΩ-km	>5000
Cut-off Frequency, (GHz)	20.4
Insulation Voltage, KV	2.0
Inner Conductor DC Resistance, Ω/km	9.50
Outer Conductor DC Resistance, Ω/km	5.70
Jacket Spark, KV	3.0
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)

Mechanical and Environmental Specifications	
Minimum Bending Radius	
Single Bend, mm(in)	12.6 (0.5)
Repeated Bends, mm(in)	25 (1.0)
Number of Bends	15
Mobile Apply, mm(in)	150 (6)
Bending Moment, N-m(lb-ft)	0.7 (0.5)
Tensile Strength, kg(lb)	60 (132)
Storage Temperature, °C(°F)	-55to+85(-67to+185)
Installation Temperature, °C(°F)	-40to+60(-40to+140)
Operating Temperature, °C(°F)	-55to+85(-67to+185)



Attenuation and Average Power			
Frequency	Attenuation		Average Power
MHz	dB/100 m	dB/100 ft	Power(KW)
100	5.60	1.71	1.23
200	8.00	2.44	0.86
450	12.20	3.72	0.57
800	16.70	5.09	0.42
900	17.50	5.33	0.39
1000	18.60	5.67	0.37
1500	23.40	7.13	0.30
1800	25.70	7.83	0.27
2000	26.90	8.20	0.26
2200	28.50	8.69	0.25
2400	30.00	9.14	0.24
2500	30.60	9.33	0.23
3000	33.50	10.21	0.21

Standard Conditions:

For attenuation, VSWR 1.0, cable temperature 20°C(68°F)

For average power, VSWR 1.0, ambient temperature 40°C(104°F),

inner conductor temperature 100°C(212°F), no solar loading.

Connector					
Type Number	Description	Length		Weight	
		mm	in	kg	lb
NM-1/4H	N Male	49	1.9	0.05	0.11
NF-1/4H	N Female	48	1.9	0.05	0.11
DINM-1/4H	7-16 DIN Male	42	1.7	0.08	0.18
DINF-1/4H	7-16 DIN Female	42	1.7	0.10	0.22

WZ-47, Saini Chowk, Budella, Vikaspuri, New Delhi-110018
 Phone-91-11-28533349, Mobile-91 98101 38894, Fax-91 11 2853-1435
 E-mail: Pradeep@rfconnectorhouse.com, Website: <http://www.rfconnector.info/>