



PRODUCT DESCRIPTION

HFSC Series cables are super flexible lightweight coaxial cables featuring a copper clad aluminum conductor, foamed polyethylene dielectric and corrugated copper metallic shield. This helically corrugated cable has the highest number of corrugations per inch and the lowest minimum bending radius, making it well-suited for jumper cable and installations where bending and tight spaces require a more flexible cable.

FEATURES

- Light weight and flexible
- Low passive intermodulation
- Easy connectorization
- Factory tested and inspected
- Rugged and durable

BENEFITS

- Easy to transport and install
- Outperforms the industry requirements for low passive intermodulation
- Full line of high-quality low intermodulation DIN and N connectors and cable preparation tools minimize installation time and expense
- 100% of all RF cables are inspected and tested to meet or exceed industry specifications including passive intermodulation
- High-quality materials result in rugged cables that are able to withstand extreme environments without corrosion

SPECIFICATIONS

Inner Conductor	Copper-clad aluminum wire
Dielectric	Foamed polyethylene
Outer Conductor	Helically corrugated copper tube
Jacket	Black polyethylene
Recommended Operating Temperature °F (°C)	-40 to +185 (-40 to +80)

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Part Number	Cable Size in (mm)	Nominal Diameter in (mm)				Minimum Bend Radius in (mm)	Approx. Weight lbs/kft (kg/km)	Flat Plate Crush Resistance lbs/in (kg/mm)	Maximum Pulling Force lbs (kg)
		Inner Conductor	Dielectric	Outer Conductor	Jacket				
HFSC-12D	½ (12)	0.14 (3.6)	0.35 (8.9)	0.48 (12.2)	0.54 (13.6)	1.26 (32)	135 (201)	0.10 (1.7)	143 (65)

ELECTRICAL SPECIFICATIONS

Part Number	Cable Size in (mm)	Conductor DC Resistance Ohms/kft (Ohms/km)		Insulation Resistance mΩ km	Dielectric Strength for 1 minute DC Potential - Volts	Velocity of Propagation %	Peak Power Rating kW	Maximum Operating Frequency GHz	Characteristic Impedance Ohms	Typical Return Loss dB
		Inner	Outer							
HFSC-12D	½ (12)	0.87 (2.85)	0.99 (3.25)	10,000	2,500	81	15.6	10.0	50	28

Frequency MHz	Attenuation at 20°C dB/100 ft (dB/100 m)	Average Power Rating at Ambient 40°C Inner Conductor 100°C kW	
		Inner	Outer
30	0.55 (1.80)	4.87	
100	1.01 (3.33)	2.62	
150	1.25 (4.10)	2.12	
450	2.22 (7.29)	1.19	
824	3.08 (10.10)	0.85	
894	3.20 (10.50)	0.82	
960	3.35 (11.00)	0.79	
1,000	3.41 (11.20)	0.77	
1,700	4.57 (15.00)	0.57	
1,800	4.72 (15.50)	0.55	
2,000	5.00 (16.40)	0.52	
2,400	5.55 (18.20)	0.47	
3,000	6.31 (20.70)	0.41	
4,000	7.44 (24.40)	0.35	
6,000	9.45 (31.00)	0.27	
10,000	12.89 (42.30)	0.20	

Frequency MHz	V.S.W.R.
800-960	1.15
1,700-2,200	1.15

Standard Conditions: V.S.W.R. 1.0, Ambient Temperature 20°C/Attenuation is typical value.