# LT-COAX-1/2S-100LSZH

### SUPERFLEX 1/2-INCH COAXIAL CABLE

The LT-COAX-1/2S-100LSZH is a super flexible 1/2-inch coaxial cable designed for high-performance RF applications. With a low smoke, halogen-free jacket (LSZH), excellent shielding effectiveness, and stable electrical performance, it is suitable for mission-critical communication systems, base stations, DAS networks, and other RF infrastructure requiring safety-compliant cabling.



## **Key Features**

- Superflex design with small minimum bending radius
- · LSZH fire-retardant jacket for indoor safety compliance
- High shielding effectiveness: >120 dB @ >10 MHz
- Impedance: 50 ±1 Ω
- · Wide operating frequency range up to 12.5 GHz
- Excellent power handling and low attenuation

# **Construction Materials**

- · Inner Conductor: Copper-clad aluminum wire
- · Dielectric: Physical foam polyethylene
- Outer Conductor: Helical copper tube
- Jacket: Low smoke, halogen-free fire-retardant (LSZH)

## **Environmental Specifications**

Storage Temperature: -55 °C  $\sim +85$  °C Installation Temperature: -40 °C  $\sim +60$  °C Operating Temperature: -55 °C  $\sim +85$  °C

#### **VSWR**

• 0.8 ~ 1.0 GHz: ≤1.13

• 1.7 ~ 2.2 GHz: ≤1.13

• 2.2 ~ 2.7 GHz: ≤1.15

Physical Dimensions		
Inner Conductor Diameter	3.60 mm	
Dielectric Diameter	9.80 mm	
Outer Conductor Diameter	12.00 mm	
Diameter Over Jacket	13.30 mm	
Mechanical Specificatio	ns	
Minimum Bending Radius – <mark>Si</mark> ngle	17 mm	
Minimum Bending Radius – Repeated	55 mm	
Minimum Number of Bends	15	
Tensile Strength	600 N	
Electrical Specification	ıs	
Capacitance	80.0 pF/m	
Impedance	50 ±1 Ω	
Velocity Factor	82%	
RF Peak Voltage	1.13 kV	
Peak Power Rating	19 kW	
Cut-off Frequency	12.5 GHz	
Shielding Effectiveness	>120 dB	
Insulation Resistance	5000 MΩ·km	

Attenuation			
Frequency (MHz)	Attenuation (dB/100 m)	Average Power (kW)	
100	0.48	20.9	
150	0.53	18.1	
200	0.52	18.5	
280	0.59	16.4	
450	0.56	17.35	
800	0.7	13.8	
900	0.63	15.55	
1000	0.94	10.56	
1500	0.88	11.15	
1800	1.37	7.2	
2000	1	9.86	
2200	2.11	4.65	
2400	1.69	5.65	
2500	3.03	3.22	
3000	2.39	4.05	

