LT-COAX-7/8-200LSZH

Superflex 7/8” Coaxial Cable

The LT-COAX-7/8-200LSZH Superflex 7/8” Coaxial Cable is a high-performance, low-loss RF transmission cable designed for demanding communication systems. Featuring a superflexible structure, it offers excellent bendability and ease of installation in space-constrained environments. Its Low Smoke Zero Halogen (LSZH) jacket ensures enhanced fire safety and minimal toxic emissions, making it ideal for indoor and enclosed installations.

This coaxial cable is primarily used in telecom infrastructure, RF signal transmission, and broadcasting systems. It is ideal for base stations, antenna connections, and other high-frequency applications requiring low loss, durability, and superior flexibility.

Key Features

- 50 Ω impedance with excellent VSWR performance.
- Low attenuation for superior signal quality.
- High shielding effectiveness (>120 dB) against interference.
- LSZH (Low Smoke Zero Halogen) jacket for fire safety.
- Wide operating temperature range: -55 °C to +85 °C.
- Strong tensile strength (1470 N) with flexible construction.
- Supports high power handling up to 91 kW peak power.
- Reliable performance up to 5.20 GHz cut-off frequency.

Construction Materials

- Inner Conductor: Helical Copper Tube
- Dielectric: Physical Foam Polyethylene
- Outer Conductor: Corrugated Copper Tube
- Jacket: Black PE

Physical Dimensions

- Inner Conductor Diameter 9.00 mm
- Dielectric Diameter 22.30 mm
- Outer Conductor Diameter 24.90 mm
- Diameter over Jacket 27.50

Electrical Specifications

- Capacitance : 75.0 pF/m
- Impedance : 50 ± 1 W
- Velocity : 89%
- RF Peak Voltage : 3.00 kV
- Peak Power Rating : 91 kW
- Cut-off Frequency : 5.20 GHz
- Shielding Effectiveness (>10 MHz) : >120 dB
- Insulation Resistance : 5000 mW • km

Environmental Specifications

- Storage Temperature: −55 °C ~ +85 °C
- Installation Temperature: −40 °C ~ +60 °C
- Operating Temperature: −55 °C ~ +85 °C

VSWR

- 0.8 ~ 1.0 GHz ≤ 1.10
- 1.7 ~ 2.2 GHz ≤ 1.13
- 2.2 ~ 2.7 GHz ≤ 1.15

Mechanical Specifications

- Minimum Bending Radius (Single Bending) : 90 mm
- Minimum Bending Radius (Repeated Bending) : 250 mm
- Minimum Number of Bends : 15
- Tensile Strength : 1470 N

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Performance Overview

Frequency (MHz)	Attenuation (dB/100m)	Attenuation (dB/100ft)	Average Power (kW)
100	1.19	0.36	8.62
150	1.47	0.45	7.20
200	1.71	0.52	5.99
280	2.05	0.62	4.94
350	2.30	0.70	4.90
450	2.64	0.80	3.88
800	3.62	1.10	2.83
900	3.87	1.18	2.65
1000	4.10	1.25	2.50
1500	5.16	1.51	1.99
1800	5.73	1.75	1.79
2000	6.09	1.86	1.68
2200	6.44	1.96	1.59
2400	6.78	2.07	1.54
2500	6.95	2.12	1.50
3000	7.74	2.36	1.33

Notes :

For attenuation: VSWR 1.0, cable temperature 20°C (68°F)
For everage power: VSWR 1.0, ambient temperature 40°C (104°F),
Inner conductor temperature 100°C (212°F) no solar loading,
Maximum attenuation value shall be 105% off the nominal attenuation value.