LT-LLC200-200LSZH

PLLC200, 50 Ohm Braided Coaxial Cable

The LT-LLC200-200LSZH is a flexible, low-loss 50 Ohm coaxial cable engineered to deliver high-quality RF signal transmission in demanding environments. It is constructed with a precision copper inner conductor and a physical foam polyethylene dielectric that ensures stable impedance and low signal distortion. The cable incorporates a bonded aluminum/polyester/aluminum tape shield combined with a tinned copper wire braid that achieves 90% coverage, providing superior protection against electromagnetic interference (EMI) and ensuring consistent performance in critical RF applications.

Encased in a Low Smoke Zero Halogen (LSZH) jacket, the LT-LLC200-200LSZH not only meets stringent fire safety requirements but also minimizes the release of toxic gases and smoke in case of fire, making it highly suitable for indoor installations, tunnels, transportation hubs, and other safety-sensitive environments. With its compact 4.95 mm jacket diameter, the cable offers exceptional flexibility and ease of installation, even in confined spaces or complex routing paths.

Key Features

- 50 W impedance with stable performance
- Low attenuation across multiple frequency bands
- High shielding effectiveness (³ 90 dB screen efficiency)
- LSZH jacket for fire safety and reduced smoke emission
- Wide operating frequency support up to 3 GHz
- Compact size (4.95 mm jacket diameter) with flexibility
- Withstanding voltage: 3.0 kV (AC)
- Peak power handling capacity: 3.53 kW

Applications

- Wireless communication and data transmission systems.
- Antenna feeder lines and RF interconnections.
- Broadband network cabling and signal distribution.
- Public safety communication infrastructure.
- Industrial RF systems and telecommunication equipment.

Electrical Specifications

- Capacitance : 78 pF/m
- Impedance : 50 ± 2 W
- Velocity : 83%
- Insulation Resistance : >5000 mW • km
- Cut-off Frequency : 3 GHz
- Withstanding Voltage (AC) : 3.0 kV
- Sparkover Voltage : 1.0 kV
- Peak Power Rating: 3.53 kW
- Screen Efficiency : 90 dB

Construction Materials

- Inner Conductor : Copper
- Dielectric : Physical Foam Polyethylene
- Outer Conductor : Bonded Aluminum/Polyester/Aluminum Tape + TC Wire Braiding
- Outer Conductor Coverage : 90%
- Jacket : Low Smoke Halogen-Free (LSZH)

LT-LLC200-200LSZH

PLLC200, 50 Ohm Braided Coaxial Cable

Electrical Specifications	
Capacitance	78 pF/m
Impedance	50 ± 2 Ω
Velocity	0.83
Insulation Resistance	>5000 mΩ • km
Cut-off Frequency	1.0 kV
Withstanding Voltage (AC)	3.0 kV
Sparkover Voltage	3.53 kW
Peak Power Rating	5000 mΩ • km
Screen Efficiency	≥90 Db

VSWR	
800 ~ 1000 MHz	≤ 1.15
1700 ~ 2000 MHz	≤ 1.20
2000 ~ 2400 MHz	≤ 1.25

Physical Dimensions	
Inner Conductor	1.12 ± 0.02 mm
Dielectric	3.00 ± 0.10 mm
Shields	3.50 ± 0.15 mm
Jacket	4.95 ± 0.15 mm

Construction Materials	
Inner Conductor	Copper
Dielectric	Physical Foam Polyethylene
Outer Conductor	Bonded Aluminum/ Polyester/ Aluminum Tape + TC Wire Braiding
Outer Conductor Coverage	0.9
Jacket	LSZH

Performance Overview

Frequency (MHz)	Attenuation (dB / 100 m)	Frequency (MHz)	Attenuation (dB / 100 m)
30	5.8	1500	42.4
50	7.5	1800	46.6
100	10.7	1900	48.0
150	13.1	2000	49.3
220	15.9	2200	51.8
450	22.8	2500	55.4
900	32.6	2800	58.8
1200	37.8	3000	60.2

Standard Conditions:

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.