FLEXIBLE RF CABLE / LOW LOSS CABLE

Cable Name: L63

Part No: VXL635



18 GHz
MAX FREQUENCY

2000 V.DC
EXTREME HIGH VOLTAGE

-155 dBc
LOW PIM PERFORMANCE

6.35 mm
HEAVY-DUTY BUILD

General Description: The Vinstronics VXL635 is a premium, ultra-low loss RF cable designed for demanding high-power environments. Featuring a heavy-duty 6.35mm blue FEP jacket, it ensures exceptional signal integrity up to 18GHz. With an extreme 2000 V.DC rating and outstanding -155dBc PIM performance, it provides highly reliable interconnects for advanced communication infrastructure.

Core Features

- **Ultra-Low Loss:** Optimized for precision long-distance transmission.
- **Low PIM:** Outstanding -155dBc performance for clear signals.
- **Extreme Voltage:** 2000 V.DC rating for intensity requirements.
- **Robust Power:** Superior handling for high-intensity signals.
- **Heavy-Duty Build:** 6.35mm outer diameter for enhanced protection.

Target Applications

- **Base Stations:** Ideal for internal wireless communication routing.
- **RF Testing:** Reliable for microwave device testing environments.
- **Avionics:** Meets strict environmental stability standards.
- **High-Power Interconnects:** Ideal for extreme high-voltage applications.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**1.57** [0.062]
2. Dielectric	Low Density PTFE (LD PTFE)	**4.72** [0.186]
3. Inner Shield	Silver-plated copper strip	**4.90** [0.193]
4. Outer Shield	Silver-plated copper wire braiding	**5.50** [0.217]
5. Jacket	FEP / Blue (Customizable)	**6.35** [0.250]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**18 GHz**
Cut-off Frequency	**23 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**2000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**16000**	**18000**
Attenuation (dB/100m)	**21.4**	**30.6**	**37.9**	**54.6**	**63.7**	**71.8**	**80.7**	**89.6**	**99.0**
Average Power (kW)	**1.019**	**0.712**	**0.577**	**0.400**	**0.343**	**0.304**	**0.271**	**0.240**	**0.220**

K1 = 0.658847 **K2 =** 0.000591 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**31 mm** [1.220 in]
Dynamic Bending Radius	**63 mm** [2.480 in]
Weight	**0.094 kg/m** [0.0632 lbs/ft]
Temperature Range	**-55 ~ +165 ℃** [-67 ~ +329 ℉]