FLEXIBLE RF CABLE / LOW LOSS CABLE

Cable Name: L37

Part No: VXL375



40 GHz
MAX FREQUENCY

1000 V.DC
WITHSTANDING VOLTS

-155 dBc
LOW PIM PERFORMANCE

Green FEP
HI-VIS ROUTING

General Description: The Vinstronics VXL375 is a highly cost-effective, low-loss RF cable designed for high-power microwave applications. Featuring a 3.75mm green FEP jacket and LD PTFE dielectric, it delivers reliable signal transmission up to 40GHz. With excellent -155dBc PIM performance and robust power handling, it is ideal for wireless communication base stations and RF testing.

Core Features

- **Ultra-Low Loss:** Optimized for efficient signal transmission.
- **Low PIM:** Outstanding -155dBc performance for clear signals.
- **Cost-Effective:** High performance-to-price ratio.
- **High Power:** Excellent power handling capabilities.
- **Green Jacket:** High-visibility FEP for easy routing identification.

Target Applications

- **Base Stations:** Ideal for internal wireless communication routing.
- **RF Testing:** Reliable for microwave device testing environments.
- **Avionics:** Meets strict environmental stability standards.
- **ECM Systems:** Dependable in electronic countermeasure setups.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**0.91** [0.036]
2. Dielectric	Low Density PTFE (LD PTFE)	**2.70** [0.106]
3. Inner Shield	Silver-plated copper strip	**2.85** [0.112]
4. Outer Shield	Silver-plated copper wire braiding	**3.30** [0.130]
5. Jacket	FEP / Green (Customizable)	**3.75** [0.148]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**40 GHz**
Cut-off Frequency	**40 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**1000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**	**26500**	**40000**
Attenuation (dB/100m)	**39.4**	**56.0**	**68.9**	**98.2**	**113.9**	**127.9**	**143.0**	**173.7**	**212.9**	**265.0**
Average Power (kW)	**0.753**	**0.530**	**0.431**	**0.302**	**0.261**	**0.232**	**0.208**	**0.171**	**0.139**	**0.112**

K1 = 1.232579 **K2 =** 0.000462 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**19 mm** [0.748 in]
Dynamic Bending Radius	**38 mm** [1.496 in]
Weight	**0.034 kg/m** [0.0228 lbs/ft]
Temperature Range	**-55 ~ +165 ℃** [-67 ~ +329 ℉]