SEMI-RIGID COAXIAL CABLE / **LOW LOSS**

Cable Name: G36

Part No: VXG36



26.5 GHz
MAX FREQUENCY

1000 V.DC
HIGH VOLTAGE

250 ℃
EXTREME TEMP RATING

Low Loss
OPTIMIZED PTFE

General Description: The Vinstronics VXG36 is a heavy-duty, low-loss semi-rigid cable operating up to 26.5GHz. Upgraded with an optimized PTFE dielectric (76% velocity) and an impressive 1000 V.DC rating, it ensures superior power handling and minimal attenuation. Capable of withstanding extreme 250℃ temperatures, it provides impenetrable >165dB shielding for critical high-power RF modules.

Core Features

- **Low Loss Transmission:** Optimized dielectric achieves a highly efficient 76% velocity.
- **High Voltage Handling:** 1000 V.DC rating provides enhanced safety and power capacity.
- **Extreme Temperature:** Survives ultra-harsh environments up to 250℃.
- **Absolute Shielding:** Seamless copper tube provides >165dB isolation.
- **Form-Stable:** Retains its complex 3D routed shape permanently after bending.

Target Applications

- **Avionics:** Meets extreme temperature and stability standards.
- **High Power Launch:** Dependable for intense high-power broadcasting modules.
- **Phased Array Radar:** Flawless internal chassis links without cross-talk.
- **Precision Instruments:** Reliable signal paths within high-end test equipment.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**0.990** [0.039]
2. Dielectric	PTFE (Optimized)	**3.000** [0.118]
3. Outer Shield/Jacket	Seamless Copper Tube	**3.580** [0.141]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**26.5 GHz**
Cut-off Frequency	**36 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**76 %**
Shielding Effectiveness	**>165 dB**
Dielectric Withstanding Voltage	**1000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**	**26500**
Attenuation (dB/100m)	**31.7**	**45.5**	**56.4**	**81.7**	**95.6**	**108.1**	**121.8**	**150.3**	**187.7**
Average Power (kW)	**0.550**	**0.383**	**0.309**	**0.213**	**0.182**	**0.161**	**0.143**	**0.116**	**0.093**

K1 = 0.965845 **K2 =** 0.001151 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**10 mm** [0.394 in]
Weight	**0.047 kg/m** [0.0316 lbs/ft]
Temperature Range	**-55 ~ +250 ℃** [-67 ~ +482 ℉]