SEMI-RIGID COAXIAL CABLE / **STANDARD**

Cable Name: G36E

Part No: VXG36E



26.5 GHz
MAX FREQUENCY

> 165 dB
RF SHIELDING

3.58 mm
DURABLE OD

Solid PTFE
COST-EFFECTIVE

General Description: The Vinstronics VXG36E is a durable, industry-standard semi-rigid cable for 26.5GHz applications. Featuring a 3.58mm seamless copper tube, it provides zero RF leakage with an absolute >165dB shielding efficiency. Its solid PTFE dielectric ensures a highly cost-effective and form-stable interconnection for demanding internal module routing.

Core Features

- **Absolute Shielding:** Seamless copper tube provides >165dB isolation, eliminating cross-talk.
- **Form-Stable:** Retains its complex 3D routed shape permanently after bending.
- **Economy Build:** Solid PTFE dielectric delivers excellent performance-to-price ratio.
- **Zero PIM:** Solid structure ensures impeccable intermodulation performance.
- **Durable OD:** 3.58mm outer diameter offers robust physical stability.

Target Applications

- **RF Module Internal:** Perfect for high-power microwave component interconnections.
- **Precision Instruments:** Reliable signal paths within high-end test equipment.
- **Base Stations:** Cost-effective permanent routing inside communication cabinets.
- **General RF Routing:** The economical backbone for standard chassis setups.

CONSTRUCTION SPECIFICATION

Component	Material & Process	Diameter mm [in]
1. Inner Conductor	Silver-plated copper	**0.940** [0.037]
2. Dielectric	Solid PTFE	**2.980** [0.117]
3. Outer Shield/Jacket	Seamless Copper Tube	**3.580** [0.141]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**26.5 GHz**
Cut-off Frequency	**34 GHz**
Impedance	**50 ± 1 Ω**
Velocity of Propagation	**70 %**
Shielding Effectiveness	**>165 dB**
Dielectric Withstanding Voltage	**500 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**	**26500**
Attenuation (dB/100m)	**38.2**	**55.5**	**69.3**	**102.4**	**120.8**	**137.7**	**156.4**	**195.9**	**249.2**
Average Power (kW)	**0.335**	**0.231**	**0.185**	**0.125**	**0.106**	**0.093**	**0.082**	**0.065**	**0.051**

K1 = 1.131702 **K2 =** 0.002450 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**15 mm** [0.591 in]
Weight	**0.047 kg/m** [0.0316 lbs/ft]
Temperature Range	**-55 ~ +125 ℃** [-67 ~ +257 ℉]