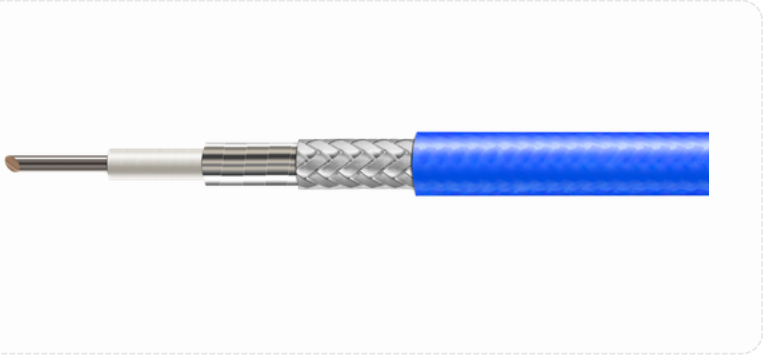
**FLEXIBLE RF CABLE / GENERAL PURPOSE FLEXIBLE CABLE**

# Cable Name: I26

Part No: VXI265



**26.5 GHz**
MAX FREQUENCY

**Low VSWR**
SIGNAL INTEGRITY

**2.65 mm**
COMPACT PROFILE

**Economy**
SEMI-RIGID REPLACEMENT

**General Description:** The Vinstronics VXI265 is a cost-effective, flexible RF cable engineered for general-purpose 26.5GHz applications. Utilizing a solid PTFE dielectric and a compact 2.65mm blue FEP jacket, it offers a reliable, low VSWR alternative to semi-rigid cables. It is specifically designed to streamline installation in dense module interconnections and radar chassis setups.

## Core Features

- **Economy Build:** High performance-to-price ratio for general-purpose use.
- **Semi-Rigid Replacement:** Highly flexible alternative to hand-formable cables.
- **Low VSWR:** Ensures excellent signal integrity across the frequency band.
- **Compact Profile:** Space-saving 2.65mm OD for dense installations.
- **Durable Jacket:** Blue FEP jacket for environmental protection.

## Target Applications

- **Chassis Interconnects:** Perfect for narrow and complicated cabinet routing.
- **Module Interconnection:** Reliable links between internal RF modules.
- **Phased Array Radar:** Ideal for internal array connection-free setups.
- **Semi-Rigid Replacement:** Cost-effective upgrades for legacy rigid routing.

## CONSTRUCTION SPECIFICATION

| Component | Material & Process | Diameter mm [in] |
|---|---|---|
| 1. Inner Conductor | Silver-plated copper | **0.53** [0.021] |
| 2. Dielectric | Solid PTFE | **1.63** [0.064] |
| 3. Inner Shield | Silver-plated copper strip | **1.83** [0.072] |
| 4. Outer Shield | Silver-plated copper wire braiding | **2.18** [0.086] |
| 5. Jacket | FEP / Blue (Customizable) | **2.65** [0.104] |

## ELECTRICAL CHARACTERISTICS

| | |
|---|---|
| Operating Frequency | **26.5 GHz** |
| Cut-off Frequency | **61 GHz** |
| Impedance | **50 ± 1 Ω** |
| Velocity of Propagation | **70 %** |
| Shielding Effectiveness | **>90 dB** |
| Dielectric Withstanding Voltage | **500 V.DC** |

## ATTENUATION AND TRANSMISSION POWER

| **Frequency (MHz)** | **1000** | **2000** | **3000** | **6000** | **8000** | **10000** | **12400** | **18000** | **26500** | **40000** |
|---|---|---|---|---|---|---|---|---|---|---|
| Attenuation (dB/100m) | **62.8** | **91.1** | **113.7** | **167.7** | **197.9** | **225.4** | **256.0** | **320.4** | **407.2** | **570.9** |
| Average Power (kW) | **0.119** | **0.082** | **0.066** | **0.045** | **0.038** | **0.033** | **0.029** | **0.023** | **0.018** | **0.048** |

**K1 =** 1.860236 **K2 =** 0.003937 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

## MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

| | |
|---|---|
| Static Bending Radius | **13 mm** [0.512 in] |
| Dynamic Bending Radius | **26 mm** [1.024 in] |
| Weight | **0.020 kg/m** [0.0134 lbs/ft] |
| Temperature Range | **-55 ~ +125 ℃** [-67 ~ +257 ℉] |