PRECISION TEST CABLE / ARMORED

Cable Name: T50KA/KB

Part No: VXT500KA/KB



26.5 GHz	≤ 1.25
MAX FREQUENCY	VSWR (@ 26.5GHZ)
± 5°	**2000 V.DC**
MECHANICAL PHASE	EXTREME VOLTAGE

General Description: The Vinstronics VXT500KA/KB is an elite armored precision test cable engineered for high-power 26.5GHz laboratory environments. Protected by a rugged 7.60mm purple PTFE armor and rated for 2000 V.DC, it delivers unparalleled mechanical phase stability (±5°) and amplitude stability (±0.05dB) during dynamic bending, guaranteeing flawless measurement repeatability.

Core Features

- **Mechanical Phase Stability:** Industry-leading ±5° stability under dynamic bending.
- **Amplitude Stability:** Strict ±0.05dB range stability for flawless data repeatability.
- **Armored Protection:** Impervious to crushing, torsion, and extreme lab wear.
- **Extreme Voltage:** 2000 V.DC rating for superior power handling.
- **Ultra-Low VSWR:** ≤ 1.25 @ 26.5GHz ensures zero reflection interference.

Target Applications

- **Lab Testing:** The ultimate choice for VNA and high-power testing.
- **EMC Lab:** Highly dependable in rigorous electromagnetic environments.
- **System Testing:** Provides flawless interconnects for complex test benches.
- **On-Site Measurement:** Armored durability for field measurements.

CONSTRUCTION SPECIFICATION

Item	Material & Process	Diameter mm [in]
1~6 VXT500 Cable	FEP Jacket Core	**5.10** [0.201]
7~8 Armor	Silver-plated copper	**6.70** [0.264]
9~10 Jacket	PTFE (Purple)	**7.60** [0.299]

ELECTRICAL CHARACTERISTICS

Operating Frequency	**26.5 GHz**
VSWR	**≤ 1.25 @ 26.5GHz**
Mechanical Phase	**± 5°**
Range Stability (Amplitude)	**± 0.05 dB**
Shielding Effectiveness	**>90 dB**
Dielectric Withstanding Voltage	**2000 V.DC**

ATTENUATION AND TRANSMISSION POWER

Frequency (MHz)	**1000**	**2000**	**3000**	**6000**	**8000**	**10000**	**12400**	**18000**	**26500**
Attenuation (dB/100m)	**27.1**	**38.9**	**48.1**	**68.6**	**81.3**	**91.9**	**103.5**	**127.4**	**158.8**
Average Power (kW)	**0.821**	**0.573**	**0.463**	**0.320**	**0.274**	**0.242**	**0.215**	**0.175**	**0.140**

K1 = 0.828800 **K2 =** 0.000900 **Formula:** Attenuation = K1 × √F(MHz) + K2 × F(MHz)

MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Static Bending Radius	**50 mm** [1.969 in]
Dynamic Bending Radius	**80 mm** [3.150 in]
Weight	**0.135 kg/m** [0.0907 lbs/ft]
Temperature Range	**-55 ~ +125 ℃** [-67 ~ +257 ℉]