

# 40 GHz Test Cable

**Spectrum Advanced Specialty Products** High frequency coax cables combine superior durability and exceptional performance. Operating with a frequency range from DC to 40 GHz, these precision cables provide low insertion loss with exceptional phase and amplitude stability. Available with armorized and weatherized protective coverings, the 40 GHz High Performance Test Cable is designed to withstand the most rugged lab, production, and environmental testing conditions.



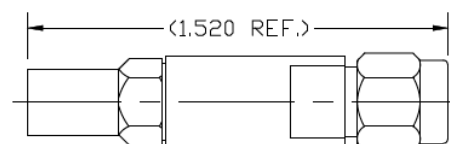
## Features

- Flexible Stainless Steel Armor
- Corrosion Resistant Shield
- Braided PET Jacketed Cover
- Passivated Stainless Steel Connectors
- Heavy Duty Over-molded Strain Relief
- Crush Resistant

The 40 GHz test cable can be supplied in standard or custom lengths, and is available in individual assemblies, pairs, or phase matched sets. The 40 GHz test cable design can also be customized with a variety of connector options.

## Mechanical Characteristics

Minimum Bend Radius	0.8 in. [cm]
Flexure Life (3x Min Bend Radius)	> 10,000 min
Jacket Diameter	0.320 in.
Over-mold Diameter	0.460 in.



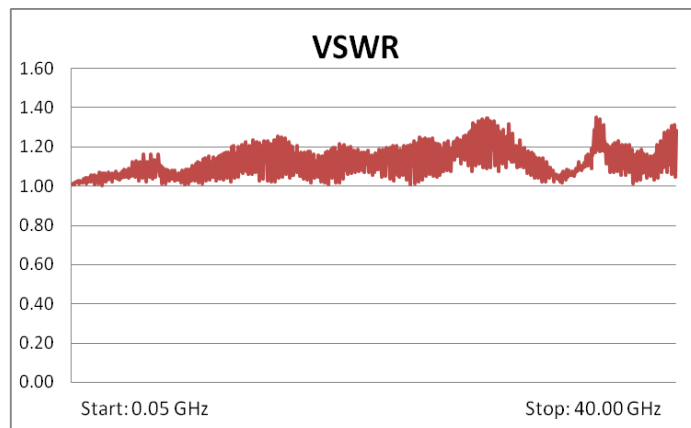
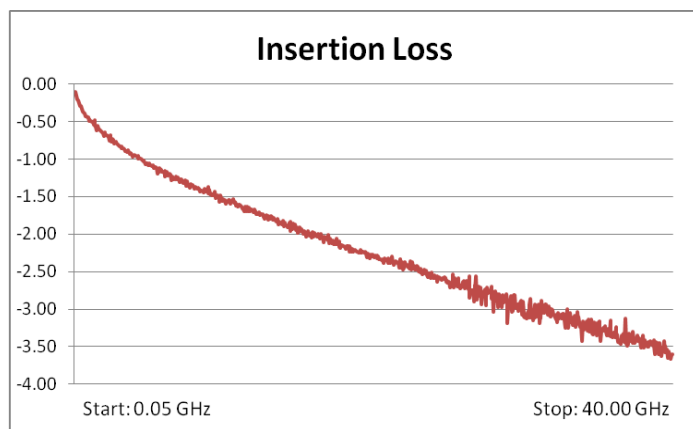
The 40 GHz test cable featured above utilizes 2.9 mm (K) series plug connectors constructed with low density PTFE insulators, silicone gasket seals, and gold plated BeCu contacts. These high quality cable assemblies are manufactured using precision interfaces designed to perform for over 500 mating cycles without degradation.

## Electrical Characteristics

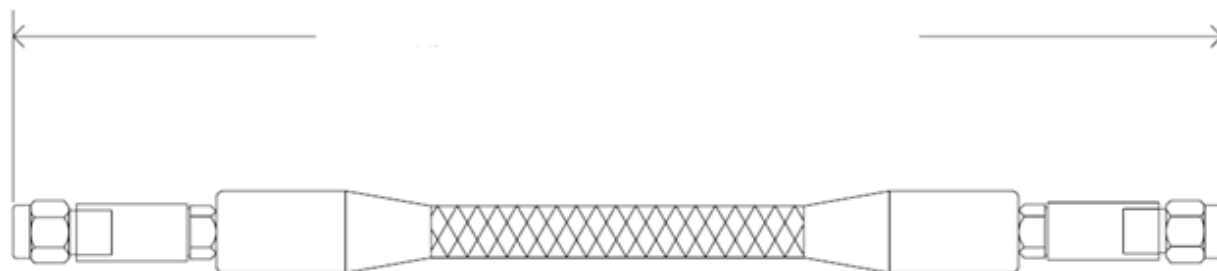
Frequency	DC - 40 GHz
Impedance	50 Ohms
VSWR	< 1.35:1
Insertion Loss	< 0.9 dB/ft + 0.7 dB Connector Contribution
Velocity of Propagation	78%
Phase Stability	± 8°
RF Shielding	90 Db
Attenuation (dB/ft)	0.90 dB max
Max Op. Voltage	1000V RMS
Power Rating (CW)	150 Watts
Operating Temp	-65 to 165° C

*All specifications above are typical, measured at 40 GHz.*

**VSWR vs. Frequency @ 36"**



**Insertion Loss vs. Frequency @ 36"**



Part Number	Description	Length (in.)
26-28-4-0012-26	40 GHz Test Cable, SS Armor & Poly Braid, 2.9mm(K) Male/Male, Straight/Straight	12"
26-28-4-0024-26	40 GHz Test Cable, SS Armor & Poly Braid, 2.9mm(K) Male/Male, Straight/Straight	24"
26-28-4-0036-26	40 GHz Test Cable, SS Armor & Poly Braid, 2.9mm(K) Male/Male, Straight/Straight	36"
26-28-4-0048-26	40 GHz Test Cable, SS Armor & Poly Braid, 2.9mm(K) Male/Male, Straight/Straight	48"
26-28-4-0072-26	40 GHz Test Cable, SS Armor & Poly Braid, 2.9mm(K) Male/Male, Straight/Straight	72"

*Please contact the factory for custom lengths and other connector or covering options.*