



# **Applications**

The K-50 coaxial probe provides an instrumentation-quality interface for broadband R.F. measurements up to 4 GHz. With the K-50 R. F. circuit design, impedance characterization measurements can be performed using it as a Network Analyzer port-extending accessory. Accurate and repeatable small signal and R.F. power (50 Watts) measurements provide consistent and repeatable results.

The K-50 was developed in cooperation with a leading manufacturer of advanced communications systems and is supported by a leading instrument equipment manufacturer.

# **Design Advantages**

The precisely-controlled physical and electrical characteristics of the K-50 make it an ideal port-extending accessory for the Network Analyzers and Time Domain Reflectometers. The R.F. center conductor system is captivated for maximum reliability.

The K-50 incorporates spring probes in an open architectured format to accomodate a wide range of physical circuit topologies and to alleviate the need for special geometry contact pads on the circuit under test.





# **K-50 Series Benefits**

- Proven RF measurements up to 4 GHz
- Consistent 50 ohm impedance
- Reliable contact to a variety of circuit board test targets
- High volume production or lab test
- Rugged design for inline applications
- Flexible open architecture for variable footprints



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# **K-50 SERIES FOR RF PROBING**

## K-50L





## K-50L-QG



## K-50L-QG-75





#### K-50H-S



#### Specifications (at full compression)

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Nominal Impedance:	50 Ohms
Minimum Return Loss @ 1Ghz:	23 db, 26 db Typical
Minimum Insertion Loss @ 1Gh	z: 0.12 db, 0.06 db Typical
Materials and Finishes	
Housing:	Gold plated copper zinc alloy
Dielectric:	Premium virgin teflon per MIL-P-18468
Replaceable Probe:	SPL-01L-039

#### Specifications (at full compression)

Nominal Impedance:	50 Ohms
Minimum Return Loss @ 1Ghz:	23 db, 26 db Typical
Minimum Insertion Loss @ 1Ghz:	0.12 db, 0.06 db Typical

#### Materials and Finishes

Housing:	Gold plated copper zinc alloy
Dielectric:	Premium virgin teflon per MIL-P-18468
Replaceable Probe:	SPL-01L-039

#### Specifications (at full compression)

Nominal Impedance:	50 Ohms
Minimum Return Loss @ 5Ghz:	18.3 dB, 16.4 dB typical
Minimum Insertion Loss @ 5Ghz:	0.370 dB, 0.371 dB typical

#### Materials and Finishes

Housing:	Brass, Gold plated
Dielectric:	Premium virgin teflon per MIL-P-18468
Replaceable Probe:	SPG-72L-005

The K-50H-S coaxial probe is a shorter version of the K-50 series measurement probe with .100 full travel and a slightly larger mounting flange. Electrical characteristics and applications are similar to the K-50.

#### Specifications (at full compression)

Nominal Impedance:	50 Ohms
Minimum Return Loss @ 1Ghz:	23 db, 26 db Typical
Mnimum Insertion Loss @ 1Ghz:	0.12 db, 0.06 db Typical

## **Materials and Finishes**

Housing:	Brass, Gold plated
Dielectric:	Premium virgin teflon per MIL-P-18468
Replaceable Probe:	SPL-01H-116

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