# Keysight Technologies

11920/1/2 Series 1, 1.85, 2.4 mm Coaxial Adapters

**Technical Overview** 

- Increased measurement versatility
- Ease-of-use for On Wafer and Coaxial measurements

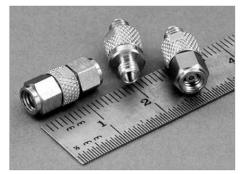


# Increased measurement versatility

For Microwave and RF engineers making coax measurements at 50, 67 or 110 GHz, the Keysight Technologies, Inc. 11920/1/2 series 1 mm adapters provide an easy way of measuring coaxial devices at high frequencies. The 11920 A/B/C, 1 mm to 1 mm are designed for the measurement of components with 50 ohm 1 mm connectors. The 11921 E/F/G/H, 1 mm to 1.85 mm and the 11922 A/B/C/D, 1 mm to 2.4 mm are intended to be used as general purpose adapters that are versatile and interchangeable. These adapters increase the capability needed to use test systems, such as the N5250A millimeter-wave PNASeries.

# Ease of use for On Wafer and Coaxial measurements

Each connector has an air dielectric interface and a center conductor that is supported by a low-loss plastic bead. Available with male and female connectors, these 1 mm adapters provide ease-of-use for microwave engineers who need to connect their test systems. The 1 mm adapters allow engineers to make fewer connections directly to their test port while maintaining the accuracy of their test system.



Keysight 11920A/B/C/D Adapters



Keysight 11921E/F/G/H Adapters



Keysight 11922A/B/C/D Adapters

# Specifications

Specifications describe the instrument's warranted performance over the temperature range 0 °C to 55 °C (except where noted). Supplemental characteristics are intended to provide information useful in applying the instrument by giving typical but nonwarranted performance parameters. These are denoted as "typical," "nominal," or "approximate."

## 1 mm to 1 mm Adapters

# Supplemental characteristics

Model Number	Coax connector Type	Frequency (GHz)	Return loss better than:	Insertion loss better than:	Repeatability typically better than:	Max CW Power
11920A	(m) to (m)	dc to 20	-24 dB	-0.5 dB	-35 dB	10 W
11920B	(f) to (f)	20 to 50	-20 dB			
11920C	(m) to (f)	50 to 75	–18 dB			
		75 to 110	-14 dB			

# 1 mm to 1.85 mm Adapters

### Supplemental characteristics

Model Number	Coax connector Type	Frequency (GHz)	Return loss better than:	Insertion loss better than:	Repeatability typically better than:	Max CW Power
11921E	(m) to (m)	dc to 67	-20 dB	-0.5 dB	1 mm -35 dB	10 W
11921F	(f) to (f)				1.85 mm -40 dB	
11921G	(m) to (f)					
11921H	(f) to (m)					

# 1 mm to 2.4 mm Adapters

# Supplemental characteristics

Model Number	Coax connector Type	Frequency (GHz)	Return loss better than:	Insertion loss better than:	Repeatability typically better than:	Max CW Power
11922A	(m) to (m)	dc to 50	-20 dB	-0.7 dB	1 mm -35 dB	10 W
11922B	(f) to (f)				2.4 mm -44 dB	
11922C	(m) to (f)					
11922D	(f) to (m)B					

# **Environmental Specifications**

**Note:** The operating temperature is a critical factor in the performance during measurements and between calibrations. Storage or operation within an environment other than that specified above may cause damage to the product and may void the warranty.

Non-operating environmental specifications apply to storage and shipment. Products should be stored in a clean, dry environment. Operating environmental specifications apply when the product is in use. Products should not be operated in a condensing environment.

	Operating	Non-operating
Temperature	0 °C to 55 °C	–40 °C to 75 °C
Altitude	<15.000 meters	<15.000 meters
	(≈ 50.000 feet)	(≈ 50.000 feet)

# Web Resource

For more information about RF and microwave test accessories visit our web site: www.keysight.com/find/accessories

#### myKeysight

### myKeysight

#### www.keysight.com/find/mykeysight

A personalized view into the information most relevant to you.

#### www.axiestandard.org



AdvancedTCA® Extensions for Instrumentation and Test (AXIe) is an open standard that extends the AdvancedTCA for general purpose and semiconductor test. Keysight is a founding member of the AXIe consortium. ATCA®, AdvancedTCA®, and the ATCA logo are registered US trademarks of the PCI Industrial Computer Manufacturers Group.

#### www.lxistandard.org



LAN eXtensions for Instruments puts the power of Ethernet and the Web inside your test systems. Keysight is a founding member of the LXI consortium.

#### www.pxisa.org



PCI eXtensions for Instrumentation (PXI) modular instrumentation delivers a rugged, PC-based high-performance measurement and automation system.

#### Three-Year Warranty



#### www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

#### Keysight Assurance Plans



#### www.keysight.com/find/AssurancePlans

Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

#### www.keysight.com/go/quality



Keysight Technologies, Inc. DEKRA Certified ISO 9001:2008 Quality Management System

### Keysight Infoline

#### www.keysight.com/find/service

#### Keysight Infoline

Keysight's insight to best in class information management. Free access to your Keysight equipment company reports and e-library.

#### Keysight Channel Partners

#### www.keysight.com/find/channelpartners

Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

#### **Americas**

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

#### Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 11 2626
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 6375 8100

#### Europe & Middle East

0800 001122
0800 58580
0800 523252
0805 980333
0800 6270999
1800 832700
1 809 343051
800 599100
+32 800 58580
0800 0233200
8800 5009286
800 000154
0200 882255
0800 805353
Opt. 1 (DE)
Opt. 2 (FR)
Opt. 3 (IT)

For other unlisted countries: www.keysight.com/find/contactus (BP-04-23-15)

United Kingdom

0800 0260637

