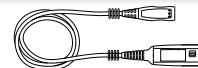


1168/9A InfiniiMax II Probes



Locate the User's Guide



Download the comprehensive 1168/9A user's guide from the probe's product page on www.keysight.com. The user's guide is also available in Keysight's Probe Resource Center (PRC) which is available at www.keysight.com/find/PRC. The PRC is an application that runs on a PC, Mac, or iOS device.

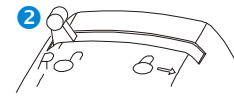
Probe Compatibility

- ◆ 90000 X and Q Series (with N5442A adapter)
- ◆ 90000A Series
- ◆ 86100C/D Series (with N1022A/B adapter)
- ◆ 80000B Series

Connecting the Probe to the Infiniium Scope

To Connect

1. With the lever in relaxed in position **1** push the probe onto the BNC.
2. The lever moves towards the R (release) **2** and returns to  symbol.
3. Move the lever towards the  symbol until snug. **3**



To Disconnect

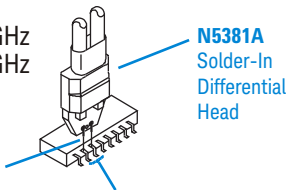
Move and hold the lever at R (release) and pull the probe from the BNC.

Recommended Probe Head Configurations (Listed in order of best performance)

1. Differential Solder-In

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz



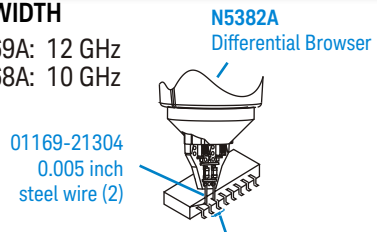
Probe either differential or single-ended signals

- ◆ Best solder-in connection for differential and single-ended signals.
- ◆ Lowest capacitance.
- ◆ Wires must be cut to proper lengths (see user's guide).

2. Differential Brower

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz



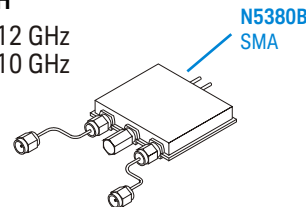
Probe either differential or single-ended signals

- ◆ Best solder-in connection for differential and single-ended signals.
- ◆ Lowest capacitance.
- ◆ Wires must be cut to proper lengths (see user's guide).

3. SMA Probe Head

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz

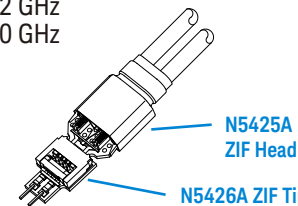


- ◆ Preserves scope channels for measuring differential signals (vs. A-B).
- ◆ Inherent cable loss compensation.
- ◆ Common mode termination voltage can be supplied.
- ◆ Offset SMA cables adapt to variable spacing.
- ◆ Full BW.

4. N5425A ZIF Head / N5426A ZIF Tip

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz



- ◆ Very small fine-pitch targets.
- ◆ Low cost solder tips for probing multiple test points.
- ◆ Full BW.
- ◆ Slightly higher loading than solder-in head.

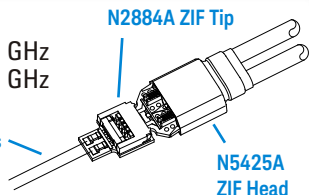
Additional Configurations

5. N2884A Fine Wire ZIF Tip

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz

22 Micron Wires



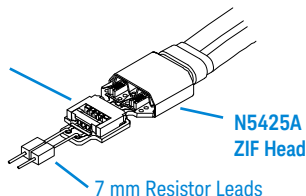
- ◆ High fidelity, high BW differential probing of active IC.
- ◆ Flat frequency response over entire 12 GHz BW.
- ◆ Greater rejection of common-mode noise due to use of local adjacent ground or node.
- ◆ Requires the N5425A ZIF head.

6. N5451A Long-Wire ZIF TIP (7 mm)

BANDWIDTH

- ◆ 0° tip span: ~9.9 GHz
- ◆ 60° tip span: ~4.4 GHz

N5451A ZIF Tip



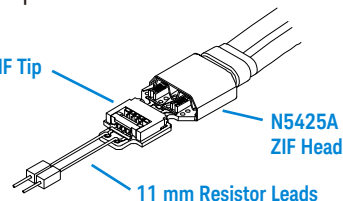
- ◆ 7 mm leads provide long reach.
- ◆ Accommodate variable-pitch targets.
- ◆ Soldered to circuit.

7. N5451A Long-Wire ZIF TIP (11 mm)

BANDWIDTH

- ◆ 0° tip span: ~5 GHz
- ◆ 60° tip span: ~3.3a GHz

N5451A ZIF Tip



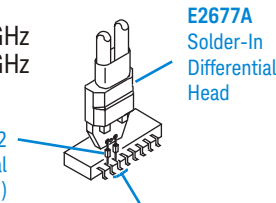
- ◆ 11 mm leads provide extra long reach.
- ◆ Accommodate variable-pitch targets.
- ◆ Soldered to circuit.

8. Differential Solder-In

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz

0700-2352
91Ω mini-axial
lead resistors (2)



Probe either differential or single-ended signals

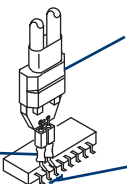
- ◆ Acceptable solder-in connection for differential and single-ended signals. N5381A is preferred.
- ◆ Higher capacitance than N5381A.
- ◆ Resistors must be cut to proper lengths (see user's guide).

9. Differential Socketed

BANDWIDTH

- ◆ 1169A: 12 GHz
- ◆ 1168A: 10 GHz

0700-2348
0W mini-axial
lead resistors (2)



Probe either differential or single-ended signals

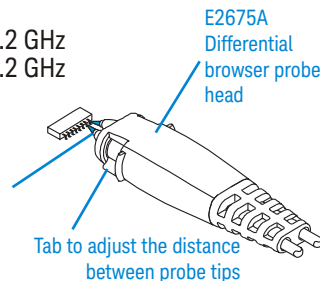
- ◆ Best socketed connection for differential and single-ended signals.
- ◆ Slightly higher capacitance than solder-in head.
- ◆ Resistors must be cut to proper lengths (see user's guide).

10. Differential Brower

BANDWIDTH

- ◆ 1169A: 5.2 GHz
- ◆ 1168A: 5.2 GHz

01131-62107
91Ω resistor
probe tips (2)



- ◆ More general purpose browser than N5382A for differential and single-ended signals.
- ◆ Lower BW and higher capacitance than N5382A.

Probe Safety Information

- ◆ Maximum Input Voltage: 30V Peak, CAT I. Maximum non-destructive voltage on each input ground.
- ◆ To protect the probe from damage, read the Probe Handling section in the user's guide.
- ◆ Refer to the user's guide for additional safety and handling information.
- ◆ Probes are ESD sensitive devices particularly at the probe heads. Follow standard ESD precautions when handling.

Keysight Technologies
Printed in USA



01168-92006
July 2013