# Keysight U1818A/B 7/12 GHz Active Differential Probes

The U1818A/B provides a high frequency probing solution for R&D and quality assurance engineers performing RF/Microwave and high-speed digital design and validation in wireline, wireless communications and aerospace/defense industries while taking full advantage of Keysight's RF analyzers capability.



High frequency probing with Keysight's MXA signal analyzer

# Key application

- General purpose RF
- Design, test & validation
- Oscillator and PLL

### The probe can...

- Measure both single ended and differential signals
- Probe RF traces without removing any components
- Be used with NA to perform response calibration

# Key features

- Broad bandwidth with flat frequency response,
  ± 1.5 dB, which ensures excellent measurement
  accuracy and helps users achieve the best product
  specifications
- Low noise floor, < -130 dBm/Hz at 10 MHz to 12 GHz, which allows measurements to be made at low signal amplitude
- Convenient biasing from Keysight's RF and microwave instruments probe power port or bench top power supply for user flexibility



# Product specifications (Typical)

| Model  | Frequency         | Input impedance at<br>1 MHz       | Nominal probe attenuation | Maximum CW input power | Maximum DC input voltage | Common mode rejection |
|--------|-------------------|-----------------------------------|---------------------------|------------------------|--------------------------|-----------------------|
| U1818A | 100 kHz to 7 GHz  | Single ended: $25~\text{K}\Omega$ | -10 dB                    | 16 dBm                 | ± 10 V                   | < 2 GHz: 35 dB        |
| U1818B | 100 kHz to 12 GHz | Differential: 50 KΩ               | -                         |                        |                          | 2 to 12 GHz: < 30 dB  |

# Probe head options

| Model    | Description                            |
|----------|--|
| N5380B   | 12 GHz differential SMA adapter        |
| N5381A   | 12 GHz differential solder-In          |
| N5382A   | 12 GHz differential browser            |
| N5425/6A | 12 GHz differential ZIF probe head/tip |

#### Related accessories

| Model  | Description                         |  |  |
|--------|-------------------------------------|--|--|
| 11582B | Minimum loss attenuator pad         |  |  |
| N2880A | In-line attenuator kit              |  |  |
| N2881A | DC blocking capacitor               |  |  |
| N2784A | 1-arm probe positioner              |  |  |
| N2785A | 2-arm probe positioner              |  |  |
| N2787A | 3D probe positioner                 |  |  |
| N5450B | Extreme temperature extension cable |  |  |
|        |                                     |  |  |

Check out the application note "High Frequency Probing Solutions for Time and Frequency Domain Applications", literature number 5989-4837EN.

For more information on Keysight probes, please visit www.keysight.com/RFprobes

To find a distributor in your area, go to: www.keysight.com/find/distributors



#### 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.

