
Specifications and Characteristics

Specifications



Input Configuration	Ground Connector True Differential (+ and \ominus inputs), with shield
Input Coupling	DC AC coupling obtained by installing an AC coupling adapter
Gain Accuracy at 1 kHz	2%
Maximum Input Voltage Either input from ground	< ± 42 V
CMRR	at 70 Hz: 80dB at 1 MHz: 40dB at 100 MHz: 25dB at 500 MHz: 19dB at 1 GHz: 13dB

Range

Mode	No attenuator	± 10 attenuator	± 20 attenuator
Differential	< ± 400 mV	< ± 4 V	< ± 8 V
Common	< ± 16 V	< ± 42 V	< ± 42 V
Offset (Common)	< ± 1.6 V	< ± 16 V	< ± 32 V

The following characteristics are valid for the 1159A probe after the probe has reached operating temperature, which is 20 minutes with power applied in a environment with stable ambient temperature. The probe must be operating within the environmental conditions listed in the “Environmental Specifications” section on page 11, and must have been calibrated within the past 12 months in a ambient temperature of 23 ± 5 °C.

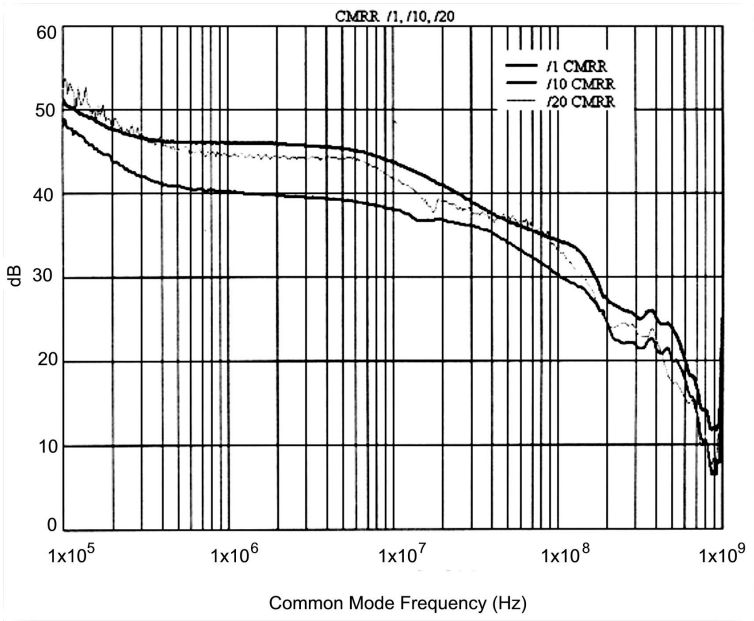
Characteristics

Probe Bandwidth (-3 dB)	DC to 1 GHz
Offset Range	± 1.6 V
Rise Time (Probe only)	<350 ps
1:1 Attenuation	
Internal switched attenuation only	
Input Resistance	1 M Ω
(each side to ground)	
Input Capacitance (between inputs)	<0.85 pF
1:1 Attenuation	
No external attenuators	
Input Capacitance (each side to ground)	<1.5 pF
1:1 Attenuation	
No external attenuators	

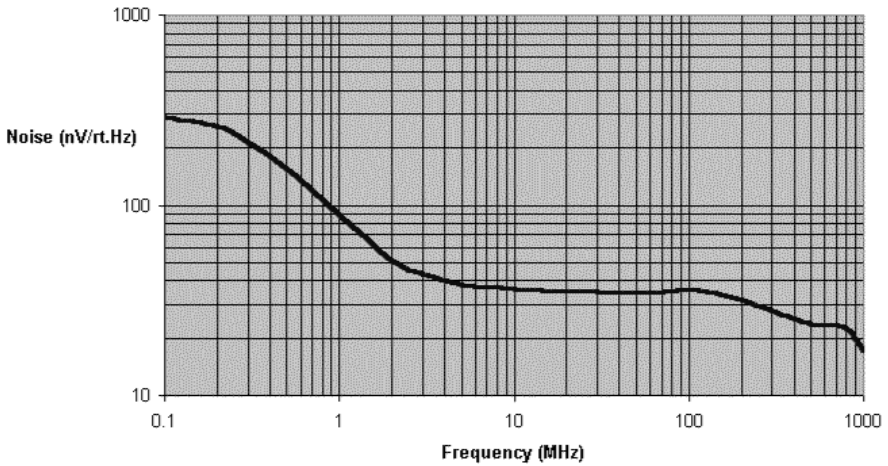
1159A 1GHz Active Differential Probe

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Typical CMRR versus Frequency (Hz)



Typical Noise



Environmental Specifications

	Operating	Non-operating
Temperature	0 to 50 °C	-40 to 75 °C
Humidity	Up to 80% RH at 40 °C	Up to 80% RH at 75 °C
Altitude	Up to 4,600 meters (15,000 feet)	Up to 15,000 meters (50,000 feet)
Vibration	Random vibration 5 to 500 Hz, 10 minutes per axis, 0.3 g _{rms}	Random vibration 5 to 500 Hz, 10 minutes per axis, 2.41 g _{rms} . Resonant search 5 to 500 Hz swept sine, 1 octave/min. sweep rate, (0.75 g), 5 minutes resonant dwell at 4 resonance's per axis.
Weight	Approximately 226 g	
Dimensions	Refer to the drawing shown below	

Dimensions

