

## 9 Specifications

### NOMINAL CHARACTERISTICS

Nominal characteristics describe parameters and attributes that are guaranteed by design, but do not have associated tolerances.

Sensitivity:

ADP300	1 V/div to 350 V/div
ADP305	200 mV/div to 350 V/div

Input Configuration True Differential, + and – inputs



Maximum Input Voltage (Figure 9–1) 1000 V rms, either input to ground, CAT III.  
1400 Vp, between inputs

Output Configuration Single ended, Ground referenced

Intended Output Load 1 M $\Omega$

Output Connector ProBus

Input Attenuation ?100 or ?1000

Bandwidth Limit Filter (ADP305 only) 20 MHz

Interface ProBus

Oscilloscope Compatibility LeCroy oscilloscope with firmware version 8.5 or higher. (Not available for 9300 series oscilloscopes)

### WARRANTED CHARACTERISTICS

Warranted characteristics are parameters with guaranteed performance. Unless otherwise noted, tests are provided in the "Performance Verification Procedure" for all warranted specifications.

Low Frequency Accuracy (probe only)	?1% of reading (?1000 Atten) ?2% of reading (?100 Atten)
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# ADP30X Active Differential Probe

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## TYPICAL CHARACTERISTICS

Typical characteristics are parameters with no guaranteed performance. Tests for typical characteristics are not provided in the "Performance Verification Procedure."

### Bandwidth:

ADP300	20 MHz
ADP305	100 MHz

### Rise Time:

ADP300	< 17.5 ns
ADP305	< 3.5 ns

### Slew Rate, referenced to input:

ADP300	60 000 V/? s
ADP305	300 000 V/? s

AC Noise < 50 mV rms

### Common Mode Rejection

(Figure 9–2):

50 Hz / 60 Hz	80 dB (10 000:1)
100 kHz	50 dB (300:1)

Input Impedance 4 M? ?|| 8 pF either input to ground

Propagation Delay 20 ns



## ENVIRONMENTAL CHARACTERISTICS

Temperature, operating 0 °C to 50 °C (32 to 122 °F)

Usage Indoor

Relative Humidity 80% max. up to 31 °C, decreasing linearly to 40% max. at 50 °C

Altitude 4600 m (15 090 ft) max. at 25 °C

## PHYSICAL CHARACTERISTICS

Weight 300 g

Overall Length 2 m

Input Lead Length 40 cm

### COMPLIANCE AND CERTIFICATIONS



#### CE Declaration of Conformity

The Oscilloscope meets requirements of the EMC Directive 89/336/EEC for Electromagnetic Compatibility and Low Voltage Directive 73/23/EEC for Product Safety.

EMC Directive:	EN 61326-1:1997+Amd1:1998	EMC requirements for electrical equipment for measurement, control, and laboratory use.
Electromagnetic Emission:	EN 55011:1998, Group 1, Class B Radiated and conducted emissions	
Electromagnetic Immunity:	EN 61000-4-2:1995*	Electrostatic Discharge (4 kV/8 kV contact/air)
	EN 61000-4-3:1996*	RF-Radiated Electromagnetic Field (3 V/m)
	EN 61000-4-4:1995*	Electrical Fast Transient/Burst (1 kV - I/O signals)
	EN 61000-4-6:1996*	RF Conducted Electromagnetic Field (3 V - I/O signals)

\*Meets Performance Criteria "B" limits at certain test levels, during the disturbance, product undergoes a temporary degradation or loss of function of performance which is self recoverable.

Low Voltage Directive:	EN 61010-1:1993+Amd2:1995	Safety Requirements for electrical equipment for measurement, control and laboratory use Part 1: General Requirements Part 2-031: Particular requirements for hand-held probe assemblies for electrical measurement and test
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The probe has been qualified to the following EN 61010-1 category:  
1000 V Installation (Over-voltage) Category III  
Pollution Degree 2

## ADP30X Active Differential Probe

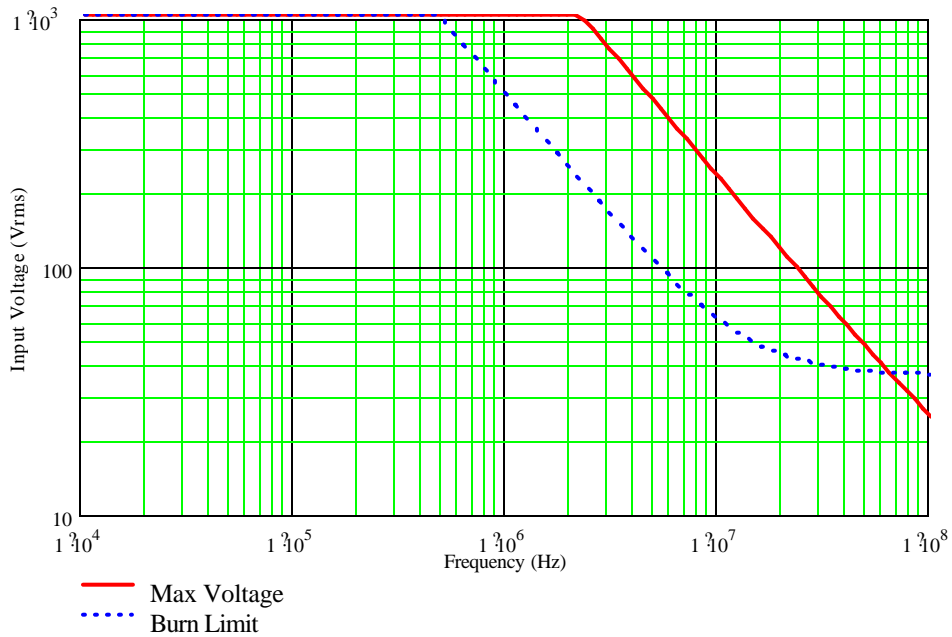


Figure 9–1. Input Voltage & Burn Limit vs. Frequency

### Note

*The voltage derating curve provides the maximum voltage that can be applied to the probe inputs without risking damage to the probe.*

*The Burn Limit is the voltage limit that should be used when the input leads are being hand-held. This limit is derived using the methodology described in EN 61010-1 section 6.3.1.2.*

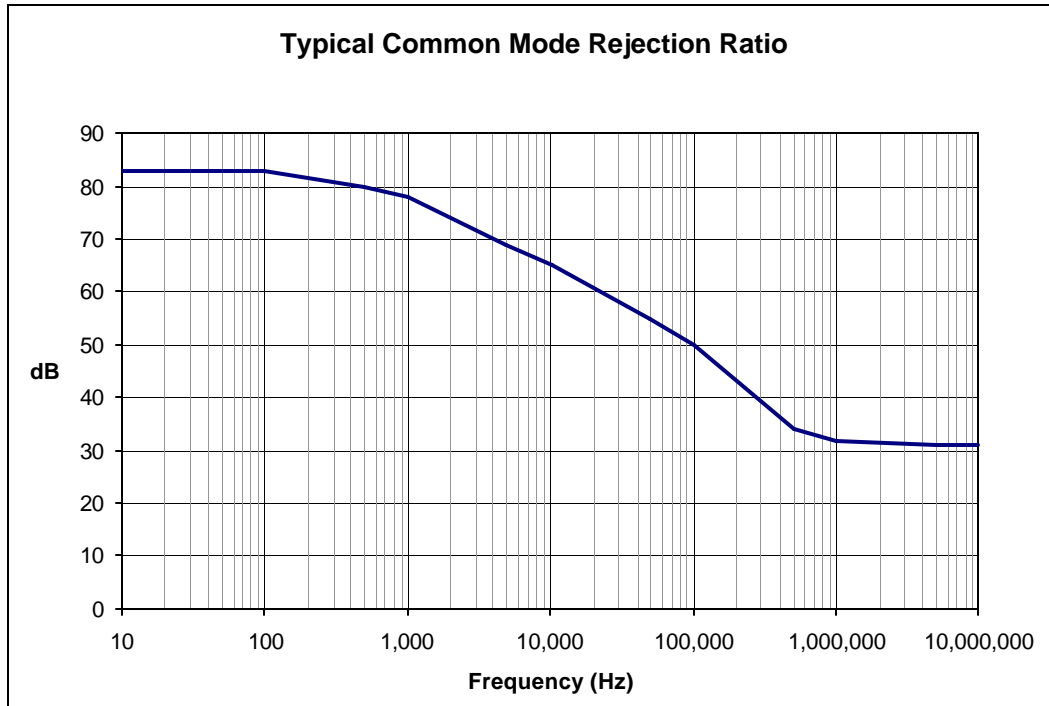


Figure 9–2. Typical CMRR vs. Frequency

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