100 MHz 700 V differential oscilloscope probe 10:1/100:1

The TA043 is an active differential probe suitable for high common-mode voltage measurement applications up to ±700 V (DC + peak AC). It can be used with signal speeds of up to 100 MHz.

This differential probe extends the functionality of standard single-ended input oscilloscopes to allow a safe and accurate method of making high-voltage differential measurements. Applications include making safe measurements in power circuit applications and acquisition of low-speed balanced differential signals found in serial communications buses.

TA043 differential probe specifications	
Bandwidth	DC to 100 MHz (–3 dB)
Attenuation ratio	10:1 / 100:1
Accuracy	±2%
Input impedance	4 MΩ || 7 pF each side to ground
Input voltage	
Differential range (10:1) Differential range (100:1)	±70 V (DC + peak AC) or 70 V RMS ±700 V (DC + peak AC) or 500 V RMS
Common mode range	±700 V (DC + peak AC) or 500 V RMS (10:1 and 100:1)
Absolute max. voltage (differential or common-mode)	1000 V RMS CAT III (10:1 and 100:1)
Output voltage	
Swing	±7V into 50 kΩ load
Offset (typical)	<±5 mV

Noise (typical)	0.9 mV RMS
Source impedance (typical)	50 Ω
CMRR (typical)	85 dB @ 50 Hz; 55 dB @ 1 MHz
Ambient operating Temperature	–10 to 40 ℃
Ambient storage temperature	–30 to 70 ℃
Power requirements	
Standard	4xAA cells or 6 V DC / 200 mA mains adaptor or regulated 9 V DC / 120 mA mains adaptor
Length of input leads	30 cm
Length of BNC lead	90 cm
Weight	500 g
Dimension (LxWxH)	202 mm x 83 mm x 38 mm