

## Features

- x20 / x50 / x100 attenuations
- Up to 25MHz bandwidth
- Up to  $\pm 700V$
- (DC+ACpeak) common mode voltage
- Over range indicator

## RS-SI 7002 RS PRO Active Differential Oscilloscope Probe

RS Stock No.: 2539783



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

The RS-SI 7002 active differential probe allows safe and accurate measurements between two voltage points where neither point is referenced to ground. These probes are perfect designed for a wide variety of measurements and are compatible with oscilloscopes from all major manufacturers.

## General Specifications

Probe Type	Active differential
Number of Probes	1
Number of Probes	Hook grip
Connector Type	2 x 4mm input leads / 1 x BNC output lead
Probe Colour	Black
Applications	Power supply measurements, motor controls, R&D

## Probe Specifications

Bandwidth	25MHz @ x200 25MHz @ x50 15MHz @ x20
Attenuation ratio	x20 / x50 / x200
DC-Accuracy	±2%
Rise Time	14ns @ x200 14ns @ x50 23ns @ x20
Absolute Maximum Rated Input Voltage (each side to ground)	600Vrms CAT III
Maximum Differential Input Voltage (DC + AC Peak)	±70V @ x20 ±175V @ x50 ±700V @ x200
Maximum Common Mode Input Voltage (DC + AC Peak)	±700V @ x20 ±700V @ x50 ±700V @ x200
Input Impedance	2MOhm // 2,3pF
Compensation Range	-
Slew Rate	-
Input Capacitance	-
Output Voltage Swing	±8V (driving 1 MΩ oscilloscope input)
Output Offset (Typical)	±5mV
Output Voltage Noise	2mVrms
CMRR (Typical)	80dB @ 60Hz, 60dB @ 100Hz, 50dB @ 1MHz
Measurement Category	CAT III
Source Impedance (Typical)	50Ω (for using 1MΩ input system oscilloscope)
Interface	-

## Electrical Specifications

Power requirement - Standard	9VDC mains adapter (included)
Power requirement - Optional	-
Battery type	-
Battery Life	-
Battery Included	-
Input Resistance	-
Input Capacitance	-
Input impedance	-
Compensation Range	-
Safety Category Level	CAT III

## Mechanical Specifications

Probe Length	195mm
Cable Length	55cm + 95cm
Length of input leads	55cm
Length of BNC lead	95cm
Dimensions	195 x 50 x 30mm
Weight	250g

## Operation Environment Specifications

Altitude	3,000m
Humidity	10% - 85%
Pollution Degree	2
Operating Temperature Range	0°C to 50°C

## Approvals

Compliance/ Certification	CE / IEC
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## Accessories Includes

Item Description	Qty
9VDC mains adapter	1
4mm test lead - red	1
4mm test lead - black	1
4mm hook grip - red	1
4mm hook grip - black	1
BNC test lead - black	1

## Similar Products

Stock No.	2539783	2539784
Model Number	RS-SI 7002	RS-SI 7005
Probe Type	active differential	active differential
Tip Style	hook grip	hook grip
Connector Type	4mm input leads / BNC output lead	4mm input leads / BNC output lead
Bandwidth	25MHz @ x200 25MHz @ x50 15MHz @ x20	60MHz @ x10 50MHz @ x5 15MHz @ x1
Attenuation ratio	x20 / x50 / x200	x1 / x5 / x10
DC-Accuracy	±2%	±2%
Rise Time	14ns @ x200 14ns @ x50 23ns @ x20	5,8ns @ x10 7ns @ x5 23ns @ x1
Absolute Maximum Rated Input Voltage (each side to ground)	600Vrms CAT III	600Vrms CAT III
Maximum Differential Input Voltage (DC + AC Peak)	±70V @ x20 ±175V @ x50 ±700V @ x200	±3,5V @ x1 ±18V @ x5 ±35V @ x10
Maximum Common Mode Input Voltage	±700V @ x20 ±700V @ x50 ±700V @ x200	±35V @ x1 ±35V @ x5 ±35V @ x10
Slew Rate	-	-
Input Impedance	2MOhm // 2,3pF	1MOhm // 2,5pF
Input Capacitance	-	-
Output Voltage Swing	±8V (1 MΩ oscilloscope input)	±4V (1 MΩ oscilloscope input)
Output Offset (Typical)	±5mV	±5mV
Output Voltage Noise	2mVrms	2mVrms
CMRR (Typical)	80dB @ 60Hz 60dB @ 100Hz 50dB @ 1MHz	80dB @ 60Hz, 60dB @ 100Hz, 50dB @ 1MHz
Probe Length	195mm	195mm
Cable Length	55cm + 95cm	55cm + 95cm