

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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THE BOOK

of
TEST ACCESSORIES

Introduction

About Cal Test Electronics

Since 1995, Cal Test Electronics has provided high quality accessories to an ever-evolving test and measurement market. From the standard to the unique, Cal Test offers solutions to fit any need.

Founded to provide original equipment manufacturers (OEMs) with custom test accessory solutions, the company has expanded, supplying its own name-brand products to a network of world-class distributors. In 2009, Cal Test purchased Global Specialties along with their offering of educational electronic products.



For most of its 20-year history, Cal Test has enjoyed a close relationship with B&K Precision Corporation, a prominent test instrument manufacturer, through a mutual shareholder position. Although both companies maintain separate corporate identities, their strong affiliation allows each to stay at the forefront of their respective markets. Their joint relationship allows B&K Precision to market the Global Specialties educational line through its international distributors, and Cal Test to be the sole supplier of test accessories to the B&K Precision instrument line.

To strengthen its European presence, Cal Test partners with Sefram Instruments SAS, a B&K Precision subsidiary, and markets selected products under the ELDITEST brand, a time-honored name in Europe.

With the 2013 acquisition of Pintek Electronics, Ltd., a well-known and respected Taiwanese test equipment manufacturer, Cal Test significantly increased its resources for manufacturing both standard and custom products.

Today, Cal Test provides one of the most complete test accessory offerings available on the market, which include:

- Oscilloscope probes passive, active, and high voltage
- DMM probes, leads, and complete accessory kits
- Banana plugs, jacks, and test lead assemblies
- Coaxial adapters and cable assemblies
- Test lead wire and storage racks

By following the latest technological advances in electronics, Cal Test regularly develops and introduces new products to meet the ever-changing needs of the test and measurement industry. We look forward to serving you in the decades to come.

Sincerely, Bill Hansen, President

20 Years of Service Excellence

Customers have been relying on Cal Test Electronics for more than 20 years. We have a time proven commitment to providing the best service, quality, selection and value.

Technical Assistance

Expert help is just a phone call away. Our product managers are ready to answer your technical questions or to provide assistance in selecting the right product for your application.

Warranty

Every new Cal Test accessory comes with a standard 1-year warranty against defects from the original date of purchase.

Distribution

An extensive network of independent distributors provides Cal Test Electronics products worldwide. Visit our website for a list of authorized distributors.

Web

For the most up-to-date product information, news, and support, visit our website at:

caltestelectronics.com

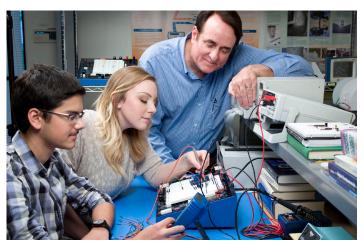




Also visit: **globalspecialties.com**







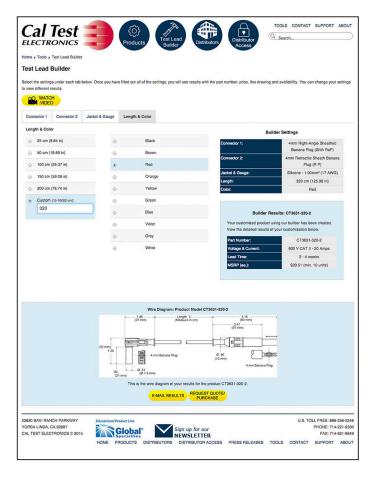
Cal Test Electronics, 22820 Savi Ranch Parkway, Yorba Linda, CA 92887 • U.S. Toll Free: 800-572-1028 • Phone: 714-221-9330 • Fax: 714-921-9849 Copyright©2015 Cal Test Electronics. All rights reserved.

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Test Lead Builder

Along with its extensive offering of standard products, Cal Test has the capability of building custom accessories as required to meet your specific needs.

Our website features a custom Test Lead Builder which allows you to configure a special test lead to exactly fit the needed application. Just make some easy selections and you will be presented with all pertinent information.





Scan QR code to view the Test Lead Builder.

Select:



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New Products



AC/DC Clamp-On **Current Probes ELDITEST Brand**

- 8 models available
- Current ranges: 40, 50, 70 & 100 A
- Bandwidths: 300 kHz, 500 kHz, 1 MHz & 1.5 MHz
- Dual sensitivity ranges & over-range indicator
- Includes adapter for either North America (120 V 60 Hz), or European (230 V 50 Hz) mains
- Full accessories included

For full Specs see page 22

Model

CP6000 Series



High Voltage Differential Probes ELDITEST Brand

Model CT4076: 35 MHz, 100x/1000x Model CT4079: 50 MHz. 200x/2000x Model CT4078: 120 MHz, 30x to 3000x

For full Specs see page 11

Model

CT4076, CT4079, CT4078



BNC Coaxial Terminators

Model CT2944-50: 50 Ω Model CT2944-75: 75 Ω **Model CT2944-93:** 93 Ω For full Specs see page 55

Model CT2944-50, CT2944-75, CT2944-93



General Purpose Differential Probes ELDITEST Brand

• Bandwidth: 35 MHz • Attenuation: 10x/100x For full Specs see page 9

Model

CT4068



High Voltage Oscilloscope Probes ELDITEST Brand

Model CT4024: 40 MHz, 1000x Model CT4025: 120 MHz, 100x Model CT4026: 150 MHz, 1000x Model CT4028: 220 MHz, 1000x For full Specs see page 15

Model

CT4024, CT4025, CT4026, CT4028



Insulated BNC to 4mm Banana Plugs

Insulated BNC female to double banana plugs.

Model CT3888: <30 VAC / <60 VDC

Model CT3889: 1,000 V CAT II / 600 V CAT III

For full Specs see page 50

Model

CT3888, CT3889



Active FET Oscilloscope Probe ELDITEST Brand

- 1.2 GHz bandwidth
- 10x attenuation
- Low 3 pF input capacitance
- Over-range indicator
- USB adapter and battery power included
- Full accessories included

For full Specs see page 7



Fused Probes ELDITEST Brand

- IEC rating 1,000 V CAT III / 600 V CAT IV w/protective cap
- Replaceable 1,000 VAC / VDC, 11 A, 20 kA IR fast-acting fuse
- Special circuit prevents hazardous "zero" reading in blown fuse situation

Model CT3999: Probe set Model CT3997: Probe body

Model CT3998-11A: Replacement fuse

For full Specs see page 32

Model

CT3999, CT3997, CT3998-11A



In-Line 4mm Banana Jacks Sheath, Fully Insulated, **DIY Assembly, Solder**

- 1,000 V CAT III / 600 V CAT IV, 36 A
- Do-it-yourself connection For full Specs see page 59

Model

CT3134-Ş-#



Electrical DMM Kit

- IEC 61010-031 rated accessories
- Cap on probe body tip provides CAT III / CAT IV rating
- Silicone jacketed lead wire
- Extra large alligator clips for electrical work

CT2621C

• Includes tri-fold nylon pouch

For full Specs see page 85

Model

4mm Banana Plugs Sheath, In-Line, Solder

- 1,000 V CAT III / 600 V CAT IV, 36 A
- Do-it-yourself safety plugs

For full Specs see page 66



4mm Banana Plugs Sheath, Stacking, Solder

- 1,000 V CAT III / 600 V CAT IV, 36 A
- Do-it-yourself safety plugs

For full Specs see page 67

Model CT2631-S-#



Basic Electrical DMM Kit

- IEC 61010-031 rated accessories
- Silicone jacketed lead wire
- Cap on probe body tip provides CAT III / CAT IV rating
- Includes tri-fold nylon pouch

For full Specs see page 85

Model



CT3738C

4mm Banana Plugs Sheath, Right-Angle, Solder

- 1,000 V CAT III / 600 V CAT IV, 20 A
- Do-it-yourself safety plugs

For full Specs see page 67



4mm Banana Plugs Retractable Sleeve, In-Line, Solder

- 600 V CAT II, 36 A
- Do-it-yourself safety plugs

For full Specs see page 68

Model CT3201-S-#



General Purpose Handheld DMM Kit

- IEC 61010-031 rated accessories
- Cap on probe body tip provides CAT III / CAT IV rating
- Sprung hooks snap-lock to probe bodies
- Silicone jacketed lead wire
- Right-angle 4 mm sheath banana plug for hand-held meter connection
- Packaged in clear PVC pouch

For full Specs see page 82

Model CT2696C



General Purpose Bench DMM Kit

- IEC 61010-031 rated accessories
- Cap on probe body tip provides CAT III / CAT IV rating
- Sprung hooks snap-lock to probe bodies
- Silicone jacketed lead wire
- Straight 4 mm sheath banana plugs for bench meters
- Extra large alligator clips
- Packaged in clear PVC pouch

For full Specs see page 87

Model CT2695C



Oscilloscope Probes

Most electronic testing requires some type of measurement probe in conjunction with a test instrument to safely and accurately access a device under test. With so many different oscilloscope probes to choose from, our goal is to make it easy for you to locate the probe that meets your needs. Whether you are looking for a simple passive, differential, current or a full featured active FET probe, you will be able to quickly scan through our extensive offerings to find the model that's just right for you.

Active FET	7
Differential	8-12
Passive	13-14, 16-21
High Voltage	15
Current	22-23
Accessories	. 7, 10, 14, 20-21

Active FET



Model	CT4121
Bandwidth	DC to 1.2 GHz
Accuracy	±2%
Input Impedance	1 MΩ//3 pF (Typical)
Attenuation	10:1
Risetime	291 ps
Input Voltage: •Max Differential (DC+Peak AC) •Absolute Max Voltage (DC+Peak AC)	±15 V ±40 V
Output Voltage: •Swing (into 50 Ω load) •Offset (Typical)	±1.5 V <±5 mV
Adjustable Output Offset Range	> -28 mV to +28 mV
Output Impedance	50 Ω
Output Cable (BNC)	120 cm
Power Requirements	5 VDC to 9 VDC / 200 mA
Operating Temperature/Humidity	-10 to +40°C / 0 to 85% RH
Storage Temperature/Humidity	-30 to +70°C / 0 to 85% RH
Dimensions	83 x 19 x 14 mm
Weight	200 g w/o battery

Active FET Oscilloscope Probe ELDITEST Brand

Introducing a high performance active probe to extend the functionality of general-purpose oscilloscopes. The cost effective ELDITEST CT4121 probe features a compact active FET probe with a 1.2 GHz bandwidth and low 1 M Ω , 3 pF input impedance. The probe is ideal for analysis, troubleshooting, and verification of high-speed logic and communication designs. Includes a USB power lead that allows the probe to be powered directly by the scope, or alternatively, a 9 V battery (included) for portability. The BNC feed-thru terminator matches the probe to 1 M Ω fixed input oscilloscopes.

- Meets IEC 61010-031 safety standards
- Power and over-range indicator
- USB or battery power
- RoHS (2011/65/EU) compliant
- Also uses power adapter Model CT3723 (not included)
- Kit comes in foam-lined case and contains:
- (1) Active FET probe
- (1) USB Power load
- (1) 9 V Battery
- (1) 50 Ω feed-thru terminator
- (1) Accessory kit (see CT4123)
- (1) User manual

Active FET Probe Accessories



BNC

Feed-Thru Terminator Model CT2944-50

Impedance: 50 Ω

Frequency Range: DC to 2 GHz

- See page 55 for complete specifications
- RoHS (2011/65/EU)



USB Power Lead

Model CT4122

Length: 200 cm

- USB to 3.5 mm power plug
- Center pin positive
- RoHS (2011/65/EU)



Connection Accessory Kit

Model CT4123

- RoHS (2011/65/EU)
- Kit contains:
- (2) SMD test clip, grey (CT3659-8)
- (2) MicroLeads, 0.8 mm, P-J, 5 cm, B/R
- (2) MicroLeads, 0.8 mm, P-J, 10 cm, B/R
- (2) Ground pin, bent
- (2) Test tip, insulated, 0.8 mm, 12.8 mm
- (2) Test tip, insulated, 0.8 mm, 16.8 mm
- (6) Test tip, un-insulated, 0.8 mm, 11.6 mm

Differential





General Purpose Differential Probes

Differential probes allow safe, accurate measurement between two voltage points where neither point is referenced to ground. The three models feature 2 attenuation settings, bandwidths to 100 MHz and differential voltages up to 1,400 V. Compatible with oscilloscopes from all major manufacturers, the probes can be battery operated or powered by a universal power adapter (not included). Models CT2593-1 & -2 include protective rubber boots. Models CT3686 & CT3687 feature power and over-range indicators.

- Meet IEC 61010-031 safety standards
- RoHS (2011/65/EU) compliant
- Use power adapter CT3723 (not included)
- Kits contain:
- (1) Differential probe
- (2) Hook probes, black & red
- (4) AA batteries
- (1) User manual

Model	CT2593-1	CT2593-2	CT3686	CT3687	
Bandwidth	25 MHz		100	100 MHz	
Attenuation	20x/200x	10x/	100x	100x/1000x	
Accuracy		±2	2%		
Risetime	14	ns	3.5	s ns	
Input Impedance		4 MΩ//5.5 pF		4 MΩ//7 pF	
Input Voltage:					
Differential Voltage (DC+Peak AC)	±140 V/±1,400 V	±70 V/	±700 V	±140 V/±1,400 V	
Common-Mode Voltage (DC+Peak AC)	±1,400 V	±700 V	±700 V or 500 Vrms	±1,400 V or 1,000 Vrms	
Absolute Max Voltage (DC+Peak AC)	±1,400 V		±1,400 V or 1,000 Vrms CAT III		
Output Voltage:					
Swing	±7 V (into 50 kΩ load)				
Offset (Typ.)	±5 mV				
Noise (Typ.)	0.7 mVrms 0.9 mVrms			ıVrms	
Source Impedance (Typ.)	50 kΩ				
CMRR (Typ.)	-86 dB@50 Hz;	-85 dB@50 Hz;	-85 dB@50 Hz; -55 dB@1 MHz		
Cable Length	95 cm				
Input Leads Length	45 cm 30 cm			cm	
Weight	400 g 500 g			0 g	
Dimensions	170 x 63 x 21 mm 202 x 83 x 38 mm			x 38 mm	

Differential



*Model	CT4068-NA CT4068-EU	
Bandwidth	35 MHz	
Attenuation	10x/100x	
Accuracy	±2%	
Risetime	10 ns	
Input Impedance	9 MΩ//1.7 pF	
Input Voltage:		
Differential Voltage (DC+Peak AC)	±80 V /±800 V	
Common-Mode Voltage (DC+Peak AC)	±800 V or 560 Vrms	
Absolute Max Voltage (DC+Peak AC)	±800 V or 560 Vrms	
Output Voltage:		
Swing	±8 V (±4 V into 50 Ω load)	
Offset (Typ.)	≤ 5 mVDC	
Noise (Typ.)	≤ 1 mVrms	
Source Impedance (Typ.)	50 Ω	
CMRR (Typ.)	-80 dB@60 Hz; -60 dB@100 Hz; -50 dB@1 MHz	
Cable Length	100 cm (separate leads)	
Input Leads Length	60 cm (separate leads)	
Weight	250 g	
Dimensions	195 x 55 x 30 mm	

^{*} Suffix for Power Adapter: – NA North American style plugs – EU European style plugs

New

General Purpose Differential Probes ELDITEST Brand

ELDITEST general-purpose differential probes allow for safe, accurate measurements between two voltage points where neither point is referenced to ground.

Model CT4068 features 10x/100x attenuation settings, 35 MHz bandwidth and ±800 V maximum differential - all in a compact, safety yellow housing. Compatible with oscilloscopes from all major manufacturers, the probe is ideal where high sensitivity and dynamic range is needed. The included power adapter is available for either North American (120 V 60 Hz) or European (220 V 50 Hz) mains.

- Meet IEC 61010-031 safety standards
- Power and over-range indicators
- RoHS (2011/65/EU) compliant
- Kits contain:
- (1) Differential probe
- (2) Pincer clips, black & red
- (2) Alligator clips, black & red
- (2) Banana plug leads, black & red
- (1) Insulated BNC cable
- (1) Power adapter
- (1) User manual

Differential



High Voltage Differential Probes

High voltage differential probes allow for safe, accurate measurements between two voltage points where neither point is referenced to ground and voltages reach to $\pm 7,000 \text{ V}$. Models CT3681 and CT3683 feature $\pm 100 \text{ x}/1000 \text{ x}$ attenuation settings, 70 MHz bandwidth and $\pm 7,000 \text{ V}$ maximum differential. Compatible with oscilloscopes from all major manufacturers, the probes can be battery operated or powered by a universal power adapter (not included).

- Meet IEC 61010-031 safety standards
- Power and over-range indicators
- RoHS (2011/65/EU) compliant
- Use power adapter CT3723 (not included)
- Kits contain:
- (1) Differential probe
- (2) Hook probes, black & red (CT3681)
- (2) HV Alligator clips, black & red (CT3683)
- (4) AA batteries
- (1) User manual

Model	CT3681	CT3683	
Bandwidth	70 MHz		
Attenuation	100x/	1000x	
Accuracy	±2	%	
Risetime	5	ns	
Input Impedance	10 MΩ//10 pF	50 MΩ//7 pF	
Input Voltage:			
Differential Voltage (DC+Peak AC)	±700 V	/ ±7 kV	
Common-Mode Voltage (DC+Peak AC)	±7 kV or 2.5 kVrms	±7 kV or 5 kVrms	
Absolute Max Voltage (DC+Peak AC)	±7 kV or 2.5 kVrms	±7 kV or 5 kVrms	
Output Voltage:			
Swing	±7 V (into 5	50 kΩ load)	
Offset (Typ.)	±5	mV	
Noise (Typ.)	0.9 m	Vrms	
Source Impedance (Typ.)	50 kΩ		
CMRR (Typ.)	-80 dB@50 Hz; -60 dB@20 kHz		
Cable Length	90 cm		
Input Leads Length	60 cm		
Weight	500 g		
Dimensions	202 x 83 x 38 mm		



Power Adapter for Differential Probes

- Switching adapter
- Length: 150 cm
- RoHS (2011/65/EU) compliant

Model	СТ3723		
Input Power	100-240 VAC 50/60 Hz		
Output Power	9 VDC 500 mA		
Output Plug	2.1 mm x 5.5 mm, Center Pin Positive		
UL Listed	Yes		
CT2593-1, CT2592-2, CT3681, Use with Models CT3683, CT3686, CT3687, CT3684, CT3685, CT3688			



ELDITEST high voltage differential probes allow for safe, accurate measurements between two voltage points where neither point is referenced to ground and voltages reach to $\pm 15\,$ kV. Models CT4076 and CT4079 feature 100x/1000x and 200x/2000x attenuation ranges, respectively, while Model CT4078 features 5 attenuation settings from 30x to 3000x - all in a compact, safety yellow housing. Compatible with oscilloscopes from all major manufacturers, the probes are ideal where high sensitivity and wide dynamic range is needed. The included power adapters are available for either North American (120 V 60 Hz) or European (220 V 50 Hz) mains.

- Meet IEC 61010-031 safety standards
- Power and over-range indicators
- RoHS (2011/65/EU) compliant
- Kits contain:
- (1) Differential probe
- (2) HV pincer clips, black & red
- (2) Alligator clips, black & red
- (2) HV banana plug leads, black & red
- (1) Insulated BNC cable
- (1) Power adapter
- (1) User manual

*Model	CT4076-NA CT4079-NA CT4079-EU CT4079-EU		CT4078-NA CT4078-EU	
Bandwidth	35 MHz	50 MHz	120 MHz	
Attenuation	100x/1000x	200x/2000x	30x/100x/300x/1000x/3000x	
Accuracy		±2%		
Risetime	10 ns	7 ns	3 ns	
Input Impedance	50 MΩ//1.3 pF	40 MΩ//1.3 pF	100 MΩ//1.0 pF	
Input Voltage:				
Differential Voltage (DC+Peak AC)	±750 V / ±7.5 kV	±1.5 kV / ±15 kV	±110 V / ±350 V / ±1.1 kV / ±3.5 kV / ±11 kV	
Common-Mode Voltage (DC+Peak AC)	±7.5 kV or 5.5 kVms	±15 kV or 10 kVms	±11 kV or 7.8 kVms	
Absolute Max Voltage (DC+Peak AC)	±7.5 kV or 5.5 kVms ±15 kV or 10 kVms		±11 kV or 7.8 kVms	
Output Voltage:				
Swing	±8 V (±4 V in	to 50 Ω load)	±5 V (±2.5 V into 50 Ω load)	
Offset (Typ.)	≦ 5 mVDC			
Noise (Typ.)	≦ 1 mVrms	< 1 m	vrms	
Source Impedance (Typ.)	50 Ω			
CMRR (Typ.)	-80 dB@60 Hz; -60 dB@100 Hz; -50 dB@1 MHz			
Cable Length	100 cm (separate leads)			
Input Leads Length	60 cm (separate leads)			
Weight	350 g			
Dimensions	220 x 85 x 30 mm 245 x 76 x 3			

^{*} Suffix for Power Adapter: – NA North American style plugs – EU European style plugs

Differential



Precision Differential Probes

Precision differential probes allow for safe, accurate measurements between two voltage points where neither point is referenced to ground and high accuracy is required. These small size probes feature fixed 10x or 100x attenuation and bandwidths up to 200 MHz. Accuracy is $\pm 1\%$ with the best CMRR in power measurement probes. Compatible with oscilloscopes from all major manufacturers, the probes can be battery operated or powered by a universal power adapter (not included).

- Meet IEC 61010-031 safety standards
- Compact probe bodies
- Power indicator
- RoHS (2011/65/EU) compliant
- Use power adapter CT3723 (not included)
- Kits come in a foam-lined plastic case and contain:
 (1) Differential probe
- (2) Hook clips, black & red
- (1) User manual

adapter (met meradea).	ot included).			
Model	CT3684 CT3685		CT3688	
Bandwidth	50 MHz		200 MHz	
Attenuation	10x	100x	10x	
Accuracy		±1%		
Risetime	7	ns	1.75 ns	
Input Impedance	1.6 MΩ//7 pF	4 MΩ//7 pF	500 kΩ//7 pF	
Input Voltage:				
Differential Voltage (DC+Peak AC)	±70 V or 70 Vrms	±700 V or 600 Vrms	±20 V or 50 Vrms	
Common-Mode Voltage (DC+Peak AC)	±700 V or 600 Vrms	±1,400 V or 600 Vrms	±60 V or 40 Vrms	
Absolute Max Voltage (DC+Peak AC)	±700 V or 600 Vrms CAT II ±1,400 V or 600 Vrms CAT II		±60 V or 40 Vrms	
Output Voltage:				
Swing	±7	7 V	±2 V (into 50 Ω load)	
Offset (Typ.)	<±2 mV <±1 mV		±2 mV	
Noise (Typ.)	0.7 mVrms	0.3 m	vrms	
Source Impedance (Typ.)		50 Ω		
CMRR (Typ.)	-95 dB@60 Hz; -60 dB@1 MHz		-80 dB@100 Hz; -50 dB@10 MHz	
Cable Length	125 cm			
Input Leads Length	50 cm			
Weight	300 g			
Dimensions	111 x 22 x 14 mm			

Passive & Accessories



Model	CT3290RA	CT3290RA-PRO	
Bandwidth	500	MHz	
Attenuation	10	Ох	
Input Impedance	10	MΩ	
Input Capacitance	8 pF		
Output Impedance	1 ΜΩ		
Risetime	0.7 ns		
IEC Rating	300 V CAT II		
Compensation	8–18 pF		
Cable Length	1.3 m		
Readout Actuator	Yes		

Accessory	Kit Contains		
Attenuator Tip Cover	1	1	
Slip-on GND Lead w/Alligator Clip	1	1	
Sprung Hook, Grey	1	1	
Deluxe Trimmer Tool	1	1	
Low Impedance Ground Tip	1	1	
Ground Collar	1	1	
SMT IC Test Clip, Grey	1	3	
Slip-on GND Lead w/0.6 mm Jack	1	1	
Identifier Rings (5 x 2 colors)	1	1	
Twin Lead Adapter, 3.5 mm		1	
BNC Adapter, 3.5 mm		1	
Cover Shell (no Slip-on GND)		1	
Cover Shell (w/ Slip-on GND)		1	
Probe Tip GNDs (0.1, 0.2, 0.3 & 0.4")		1	
IC Tip Insulator		1	
Tip Insulator		1	
IC Lead Combs, 0.050" (Yellow)		3	
IC Lead Combs, 0.025" (Blue)		3	
IC Lead Combs, 0.5 mm (Red)		3	

^{*} Tektronix® is a registered trademark of Tektronix, Inc.

Passive Voltage Compact Body, 3.5mm Replacement for Tektronix® P6139A*

One of our highest frequency passive probes at 500 MHz. Excellent replacement probe when the application requires the utilization of high frequency scopes. Probes include a readout actuator pin (sense pin) on the BNC connector. Model CT3290RA comes complete with accessories, Model CT3290RA-PRO includes enhanced accessories (see images).

- IEC 61010-031 rated
- RoHS (2011/65/EU) compliant

Passive & Accessories

3.5mm Oscilloscope Probe Accessories

- Compatible with all 3.5 mm compact oscilloscope probes
- RoHS (2011/65/EU) compliant



Ground Lead

Model

CT3645-12-8

Specialized slip-on ground lead with miniature alligator clip. 12 cm long, color grey. Sold in package of 5.



Tip Insulator

Model

CT3646-8

Cover for the attenuator tip assembly, color grey. Sold in package of 10.



Sprung Hook

Model

CT3647-8

Probe sprung hook. Gold plated, color grey. Sold in package of 10.



Ground Tip

Model

CT3649

Low impedance 3.5 mm compact probe tip used in conjunction with ground collar CT3650-8 for low impedance grounding. Sold in package of 10.



Ground Collar

Model

CT3650-8

Collar for 3.5 mm compact probes used in conjunction with ground tip CT3649 for low impedance readings. Color grey. Sold in package of 10.



Cover Shell

Model

CT3652-8

Cover shell for 3.5 mm compact probes with slip-on ground. Used for connecting BNC adapter and probe tip grounds. Use in conjunction with tip Insulator CT3653-8. Color grey. Sold in package of 10.



Tip Insulator

Model

CT3653-8

Tip cover for 3.5 mm compact probes. Use in conjunction with cover shell CT3652-8. Color grey. Sold in package of 10.



IC Tip Insulator

Model

CT3654-8

Tip cover for IC probing. Replacement tip compatible with all 3.5 mm compact scope probes. Use in conjunction with cover shell CT3652-8. Color grey. Sold in package of 10.



BNC Adapter

Model

CT3655

Non-terminated BNC tip adapter. Use in conjunction with cover shell CT3652-8. Sold in package of 10.



Ground Lead

Model

CT3661-15-8

Specialized ground lead. Slip-on ground with 0.6 mm pin jack. Use with SMT Test Clip, CT3659-8. 15 cm long. Color grey. Sold in package of 10.



Attenuator Tip

Model

CT3667

Replacement attenuator tip assembly, 10x, 500 MHz. Will work for both the CT3290RA and the CT3290RA-PRO. Sold in package of 5.



Cover Shell & Tip Grounds

Model

CT3672

Cover for attenuator tip assembly with probe tip grounds. Kit includes 2 each of 4 ground tip sizes: 0.1", 0.2", 0.3" and 0.4" spacing. Gold plated ground tips. Sold in package of 1.



IC Comb Kit

Model

CT3675

12-piece IC lead comb kit. Yellow, .050" lead centers. Gold plated. Sold in package of 1.



IC Comb Kit

Model

CT3676

12-piece IC lead comb kit. Blue, .025" lead centers. Gold plated. Sold in package of 1.

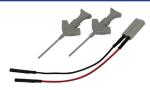


IC Comb Kit

Model

CT3677

12-piece IC lead comb kit. Red, 0.5 mm lead centers. Gold plated. Sold in package of 1.



Twin Lead Adapter

Model

CT3678

Twin lead adapter with two SMT Test Clips. Use with cover shell. Sold in package of 1.



voltage measurement using your oscilloscope. The five models feature both 100x or 1000x divider ratios with voltages up to 28 kVrms and bandwidths to 220 MHz. Compatible with oscilloscopes from all major manufacturers, the probes are required for safe user measurements.

• RoHS (2011/65/EU) compliant



As with any high voltage instrument, please read and follow all user instructions.

Model	CT4024	СТ2982В	CT4025	CT4026	CT4028
Bandwidth	40 MHz	50 MHz	120 MHz	150 MHz	220 MHz
Attenuation	100	00x	100x	1000x	
Input Impedance		100 ΜΩ		200 ΜΩ	900 ΜΩ
Input Capacitance	3	pF	2 pF	1.5 pF	2 pF
Output Impedance			1 ΜΩ		
Risetime	9 ns	7 ns	3 ns	2.4 ns	1.6 ns
Voltage Max (DC+AC peak)	8 kV	15 kV	10 kV CAT II	18 kV CAT II	40 kV CAT II
Voltage Max (ACrms)	6 kV	10 kV	7 kV CAT II	12 kV CAT II	28 kV CAT II
Compensation	5–50 pF		10-35 pF		
VDC Accuracy	±2% (DC to 5 kV) ±3% (5 kV to 8 kV)	±3% (DC to 15 kV)	≤3% Full Range		
VAC Accuracy	≤3% @ 1 kHz				
Cable Length	2 m ± 0.2 m				
Readout Actuator			Yes		

High Voltage Oscilloscope Probe Accessories

Can be used with all HV probes



Round **Replacement Tip**

Model CT2960A

5 mm thread. Gold plated. Sold in package of 10. RoHS (2011/65/EU) compliant.



Hook **Replacement Tip** Model CT2961A

5 mm thread. Gold plated. Sold in package of 10. RoHS (2011/65/EU) compliant.



Flat Bar Replacement Tip

CT2962A Model 5 mm thread. Gold plated.

Sold in package of 10. RoHS (2011/65/EU) compliant.





BNC Converter

Model

Converter adapts high voltage oscilloscope probes for use with digital multimeters (DMMs).

CT3197B

• Bandwidth: DC to 50 MHz

• Meter impedance: 10 Ω

• RoHS (2011/65/EU) compliant



Passive Voltage, 5mm

Cal Test's standard 5 mm passive voltage probes offer excellent quality and performance at an economical price. With low noise figures and wide compensation ranges, the probes work with oscilloscopes from all major manufacturers.

- Bandwidths to 500 MHz
- Fixed and switched attenuations
- Wide compensation ranges

- Selected models with readout actuators (sense pins)
- IEC 61010-031 rated
- Full accessories included
- Model CT3288ARA features enhanced accessory kit: (1) twin lead adapter, (3) SMT IC test clips, (1) GND lead with (1) 0.6 mm jack and probe top grounds (0.1, 0.2, 0.3 & 0.4")
- RoHS (2011/65/EU) compliant

Fixed - 600 V Rated

TIACA OOO VINAL	-								
Model	СТ2678	СТ2676А	CT2676ARA	CT2840RA	CT3133	CT3133RA	CT3288RA	CT3288ARA*	
Bandwidth	15 MHz	100	MHz	250 MHz	350	MHz	500	MHz	
Attenuation	1x				10x				
Input Impedance	1 ΜΩ				10 ΜΩ	,			
Input Capacitance	46 pF	16	pF	14 pF	12 pF				
Output Impedance				1 N	ИΩ	.,			
Risetime	27 ns	3.5	5 ns	1.4 ns	1 ns		0.7	7 ns	
IEC Rating				300 V CAT II ,	/ 600 V CAT 0	,			
Compensation				10−35 pF			9–1	8 pF	
Cable Length			1.2 m						
Readout Actuator	N	lo	Yes	Yes	No		Yes		

Accessory	Kit Contains								
Sprung Hook	1	1	1	1	1	1	1	1	
GND Lead w/Alligator Clip	1	1	1	1	1	1	1	1	
BNC Adapter	1	1	1	1	1	1	1	1	
Replacement Tip	1	1	1	1	1	1	1	1	
Probe Tip Ground		1	1	1	1	1	1		
Trimmer Tool		1	1	1	1	1	1	1	
IC Tip Insulator	1	1	1	1	1	1	1	1	
Tip Insulator	1	1	1	1	1	1	1	1	
Identifier Rings					1	1	1	1	

 $[\]ensuremath{^{*}}$ CT3288ARA includes an enhanced kit described in copy above.

Fixed - 1,200 V Rated

Model	СТ2707
Bandwidth	250 MHz
Attenuation	100x
Input Impedance	100 ΜΩ
Input Capacitance	6.5 pF
Output Impedance	1 ΜΩ
Risetime	1.4 ns
IEC Rating	1,200 V CAT 0
Compensation	10-35 pF
Cable Length	1.2 m
Readout Actuator	No

Kit Contains							
Sprung Hook	1						
GND Lead w/ Alligator Clip	1						
BNC Adapter	1						
Replacement Tip	1						
Trimmer Tool	1						
IC Tip Insulator	1						
Tip Insulator	1						



Passive



Passive Voltage, 5mm (continued)

Switchable - 600 V Rated

Model	CT2703	CT2674A	CT2704	CT2704SA	CT2675A	CT3277SA	CT2850	CT2841A
Bandwidth	15/60 MHz	6/100 MHz	15/10	15/100 MHz		6/250 MHz	10/250 MHz	15/350 MHz
Attenuation	1x/10x	1x/10x/REF	1x/	10x	1x/10x/REF	1x/10x	1x/10x/REF	1x/10x
Input Impedance		1/10 ΜΩ						
Input Capacitance	46/18 pF	90/16 pF	45/1	45/16 pF		47/17 pF	90/14 pF	90/12 pF
Output Impedance				1 1	МΩ			
Risetime	27/5.8 ns	58/3.5 ns	27/3	.5 ns	35/1.8 ns	58/1.4 ns	35/1.4 ns	27/1.0 ns
IEC Rating				300 V CAT II	/ 600 V CAT 0			
Compensation				10-3	35 pF			
Cable Length				1.2	2 m			
Readout Actuator				N	lo			
Insulated BNC		No		Yes	No	Yes	N	0

Accessory		Kit Contains								
Sprung Hook	1	1	1	1	1	1	1	1		
GND Lead w/Alligator Clip	1	1	1	1	1	1	1	1		
BNC Adapter	1	1	1	1	1	1	1	1		
Replacement Tip	1	1	1	1	1	1	1	1		
Probe Tip Ground		1	1	1	1	1	1	1		
Trimmer Tool	1	1	1	1	1	1	1	1		
IC Tip Insulator	1	1	1	1	1	1	1	1		
Tip Insulator	1	1	1	1	1	1	1	1		
Identifier Rings	1		1	1		1		1		

Passive

Passive Voltage, 5mm ELDITEST GE Series

SMD circuit technology provides low input capacitance and fast rise-times to the GE family of voltage probes. A wide compensation range allows use with oscilloscopes from all major manufacturers. The probes carry the ELDITEST brand name recognized internationally for quality and performance.

- Bandwidths to 500 MHz
- Fixed and switched attenuations
- Wide compensation ranges
- Selected models with readout actuators (sense pins)
- IEC 61010-031 rated
- Full accessories included
- RoHS (2011/65/EU) compliant



Fixed - 600 V Rated

Model	GE1501	GE2501	GE1511	GE1511RA	GE2511	GE2511RA	GE4511RA		
Bandwidth	30 MHz	55 MHz	150	MHz	250 MHz		500 MHz		
Attenuation	1	х		10x					
Input Impedance	1 ΜΩ			10 ΜΩ					
Input Capacitance	45 pF			12 pF			10 pF		
Output Impedance		1 ΜΩ							
Risetime	11 ns	6.4 ns	2.3	ns	1.4	ns	0.7 ns		
IEC Rating				300 V CAT II					
Compensation	N	0		10-3	30 pF		6–22 pF		
Cable Length				1.2 m			_		
Readout Actuator		No		Yes	No	Y	es		

Accessory	Kit Contains								
Sprung Hook	1	1	1	1	1	1	1		
GND Lead w/Alligator Clip	1	1	1	1	1	1	1		
BNC Adapter	1	1	1	1	1	1	1		
Replacement Tip	1	1	1	1	1	1	1		
Probe Tip Ground		1	1	1	1	1	1		
Trimmer Tool			1	1	1	1	1		
IC Tip Insulator	1	1	1	1	1	1	1		
Tip Insulator	1	1	1	1	1	1	1		
Identifier Rings	1	1	1	1	1	1	1		

Switchable - 600 V Rated

Model	GE1521	GE2521					
Bandwidth	17/15	0 MHz	25/250 MHz				
Attenuation		1x/10x					
Input Impedance		1/10 ΜΩ					
Input Capacitance		45/12 pF					
Output Impedance	1 ΜΩ						
Risetime	20/2	3 ns	14/1.4 ns				
IEC Rating		300 V CAT II					
Compensation		10-30 pF					
Cable Length		1.2 m					
Readout Actuator		No					
Insulated BNC	No	Yes	No				

Kit Contains							
Sprung Hook	1						
GND Lead w/ Alligator Clip	1						
BNC Adapter	1						
Replacement Tip	1						
Probe Tip Ground	1						
Trimmer Tool	1						
IC Tip Insulator	1						
Tip Insulator	1						
Identifier Rings	1						



Passive

Passive Voltage, 5mm ELDITEST GE Series

The GE family includes a unique offering of high voltage passive probes at 2,000 and 4,000 volts. Higher then most 100x probes, selected units offer accuracies of 0.5 ppm/V or 1%.

- Bandwidths to 200 MHz
- Low input capacitances
- High accuracy models
- IEC 61010-031 rated
- Full accessories included
- RoHS (2011/65/EU) compliant



Fixed - 2,000 V Rated

- 1,000 - 1,000								
Model	GE3125	GE3121	GE3225	GE3231				
Bandwidth	150 MHz 200 MHz							
Attenuation		10	0x					
Input Impedance		100 ΜΩ						
Input Capacitance		5 pf						
Output Impedance		1 ΜΩ						
Risetime	2.3	ns	1.8	ns				
IEC Rating		2,000 \	/ CAT 0					
Compensation		10-3	30 pF					
Cable Length		1.2	? m					
Readout Actuator		N	0					
Voltage Coefficient (VCR)	0.5 ppm/V (1%)	≤30 ppm/V (6%)	0.5 ppm/V (1%)	≤30 ppm/V (6%)				

Accessory	Kit Contains						
Sprung Hook	1	1	1	1			
GND Lead w/Alligator Clip	1	1	1	1			
HV Replacement Tip	1	1	1	1			
Trimmer Tool	1	1	1	1			
IC Tip Insulator	1	1	1	1			
Identifier Rings	1	1	1	1			

Fixed - 4,000 V Rated

Model	GE3425	GE3421
Bandwidth	100	MHz
Attenuation	100x	
Input Impedance	100	ΜΩ
Input Capacitance	5 pf	
Output Impedance	1 ΜΩ	
Risetime	3.5 ns	
IEC Rating	4,000 V CAT 0	
Compensation	10−30 pF	
Cable Length	1.2 m	
Readout Actuator	No	
Voltage Coefficient (VCR)	0.5 ppm/V (1%)	≤30 ppm/V (6%)

Each Kit Contains		
Sprung Hook	1	
GND Lead w/Alligator Clip	1	
HV Replacement Tip	1	
Trimmer Tool	1	
IC Tip Insulator	1	
Identifier Rings	1	



Passive & Accessories

5mm Oscilloscope Probe Accessories

• RoHS (2011/65/EU) compliant.



BNC Adapter

Model	CT2708

Non-terminated. Sold in package of 10.



Sprung Hooks

|--|

Snap locking feature holds hook firmly to probe. Package of 10.

 Model
 Color

 CT2709A-0
 Black

 CT2709A-2
 Red

 CT2709A-8
 Grey



Alligator Clip Ground Leads

Model CT2710-12-#

Voltage: 300 V; Length: 12 cm. Sold in package of 10. **Model Color**

CT2710-12-0 Black CT2710-12-8 Grey



Replacement Tips

Model	CT2711A-#	
Threaded	ded. Sold in package of 10.	
Model Color		
CT2711A-	0 Black	
CT2711A-	8 Grey	



Tip Insulators

Model CT2712A-#

This cover is compatible with most 5 mm scope probes. Sold in package of 10.

Model Color CT2712A-0 Black CT2712A-8 Grey



IC Lead Tip Insulators

Model CT2713A-#

Sold in package of 10.

Model Color

CT2713A-0 Black

CT2713A-0 Black CT2713A-8 Grey



Tip Ground

Model CT2714

Moves ground point close to the tip for best signal.
Sold in package of 10.



Trimmer Tool

Model CT2715

Sold in package of 10.



Model CT2838A

9-piece kit. Excellent for getting started; also as replacement for worn or lost original devices.

Kit includes:

- (1) BNC Adaptor
- (1) Sprung Hook
- (1) Replacement Tip(1) IC Lead Tip Insulator
- (1) Tip Insulator (1) Tip Ground
- (1) Trimmer Tool
- (2) Identifier Rings



Tip Ground Kit

Model CT3668

4-piece kit. Gold plated.

Kit includes:

- (1) Probe Tip Ground, 2.5 mm (0.1") Reach
- (1) Probe Tip Ground, 5 mm (0.2") Reach
- (1) Probe Tip Ground, 7.5 mm (0.3") Reach
- (1) Probe Tip Ground, 10 mm (0.4") Reach

RoHS (2011/65/EU) compliant

Sold in package of 1

20

Passive & Accessories

5mm Oscilloscope Probe Accessories (continued)



Ground Lead

Model CT3669-15-8
Ground lead for 5 mm probes

with 0.6 mm pin jack, 15 cm (6") Grey (Gold C-Clip). Sold in package of 10.

Model Color CT3669-15-8 Grey



Twin lead Adapter

Model CT3679

Twin lead adapter with two SMT test clips. Use with cover shell. Sold in package of 1.



Deluxe Trimmer Tool

Model CT3648

Sold in package of 10.



Identifier Rings

Model CT3662

Probe marking clips, 10 pieces (5 colors x 2 each).
Sold in package of 10.



High Voltage Replacement Tip

Model

CT3823-0

For 2 kV and 4 kV Elditest 5 mm scope probes. Threaded. Sold in package of 10.

Model CT3823-0 **Color** Black

Current



AC/DC Clamp-On Current Probes ELDITEST Brand

ELDITEST current probes extend the functionality of general purpose oscilloscopes. These active probes feature dual-range selection, over-range indicator, and battery power (battery not included) for portable applications. The included power adapter is available for either North American (120 V 60 Hz) or European (230 V 50 Hz) mains.

- Current ranges: 40, 50, 70 & 100 A
- Bandwidths 300 kHz, 500 kHz, 1 MHz
 & 1.5 MHz
- Dual sensitivity ranges
- Over-range indicator
- Adapter (included) or battery powered
- Full accessories included
- RoHS (2011/65/EU) compliant

- Kits include:
 - (1) Current probe
 - (1) Insulated BNC cable
 - (1) BNC to banana plug adapter
 - (1) AC adapter
 - (1) User manual

*Model	CP6220-NA	CP6550-NA	CP6770-NA	CP6990-NA
	CP6220-EU	CP6550-EU	CP6770-EU	CP6990-EU
Measurement Ranges	100 mV/A / 10 mV/A	200 mV/A / 20 mV/A	500 mV/A / 50 mV/A	1 V/A / 100 mV/A
Current (DC + peak AC)	10 A / 100 A	5 A / 50 A	7 A / 70 A	4 A / 40 A
DC Measurement Accuracy	±3% ±50 mA @ 100 mV/A (50 mA to 10 A peak) ±4% ±50 mA @ 10 mV/A (500 mA to 40 A peak) ±15% max @ 10 mV/A (40 A peak) to 100 A peak)	±3% ±30 mA @ 200 mV/A (30 mA to 5 A peak) ±4% ±300 mA @ 20 mV/A (300 mA to 20 A peak) ±15% max @ 200 mV/A (20 A peak to 50 A peak)	±3% ±20 mA @ 500 mV/A (20 mA to 14 A peak) ±4% ±200 mA @ 50 mV/A (200 mA to 100 A peak) ±15% max @ 50 mV/A (100 A peak) to 140 A peak)	±3% ±10 mA @ 1 V/A (10 mA to 8 A peak) ±4% ±100 mA @ 100 mV/A (100 mA to 80 A peak)
Bandwidth	DC - 300 kHz	DC - 500 kHz	DC - 1 MHz	DC - 1.5 MHz
Rise and Fall Time	1.2 μs (typ.)	0.7 μs (typ.)	0.35 μs (typ.) 0.23 μs (typ.)	
Max Working/ Floating Voltage	600 VAC RMS CAT II 300 VAC RMS CAT III			
Battery Life	8 hours		6 hours	4 hours
Max Cable Diameter	11 mm (.43") 10.3 mm (.40")		m (.40")	
Dimensions	262 x 79 x 36 mm (10.3" x 3.15" x 1.4")		262 x 81 x 36 mm (10.3" x 3.2" x 1.4")	
Weight	260 g w/o battery		260 g w/o battery 310 g w/o battery	

^{*} Suffix for Power Adapter: – NA North American style plugs – EU European style plugs

Current & Accessories

AC/DC Current Probe Accessories

Can be used with Elditest clamp-on current probe models: CP6220-NA, CP6550-NA, CP6770-NA, CP6990-NA CP6220-EU, CP6550-EU, CP6770-EU, CP6990-EU

BNC to Banana Plug Adapter



Model CT3956

Model CT3956 is an insulated BNC female to sheath banana plug adapter. Sold in package of 5.

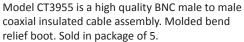
Features:

Voltage Max: 500 Vrms
Current Max: 3 A
Impedance: 50 Ω
Temperature: 0° to +50° C

RoHS (2011/65/EU) compliant

BNC to BNC Coaxial Cable





Features:

• Connector Grade: general purpose

• Impedance: 50 Ω

Frequency range: DC to 1 GHz
VSWR Max: 1.2:1 - DC to 1 GHz
Cable Type: RG-58C/U

• Length: 100 cm

• RoHS (2011/65/EU) compliant

Model	CT3957-NA	CT3957-EU
Mains Plug Style	North American	European
Input Power	120 VAC 60 Hz	230 VAC 50 Hz
Output Power	9 VDC 300 mA	
Output Plug	2.1 mm x 5.5 mm, Center Pin Negative	
UL Listed	Yes	
Use with Models	CP6220-NA; CP6550-NA; CP6770-NA; CP6990-NA; CT4068-NA; CT4076-NA; CT4078-NA; CT4079-NA	CP6220-EU; CP6550-EU; CP6770-EU; CP6990-EU; CT4068-EU; CT4076-EU; CT4078-EU; CT4079-EU



CT3957-NA

Power Adapters for AC/DC Current Probes

• RoHS (2011/65/EU) compliant

Digital Multimeter Probes



Digital Multimeter Probes

Cal Test Electronics offers one of the most extensive lines of DMM probes. In this section you will find the most widely used probes with leads, probe bodies, fused probes, plus the accessories for all your testing needs.

Probes with Leads	. 25-20
RF & High Voltage Probes	26
Probe Bodies	27-28
Probe Accessories	29
3900 Series Probes	30-3
Fused Probes	32-3

Digital Multimeter Probes



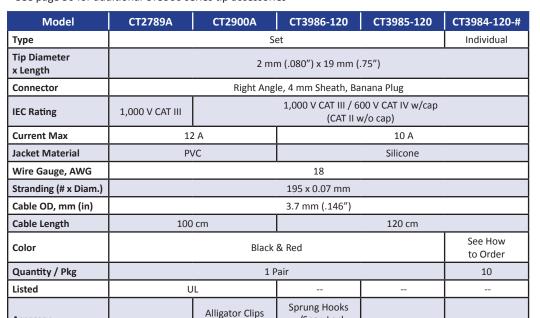
DMM Probes with Leads Right-Angle Connector

Probes feature 4 mm right-angle sheath banana plug connectors, usable with all major brands of digital multimeters.

• IEC 61010-031 rated

Accessory

- PVC & silicone lead wires
- RoHS (2011/65/EU) compliant
- See page 30 for additional CT3900 series tip accessories



1,000 V CAT III

How to Order	Color (-#)	
CT3984-120-#	-0 Black	-2 Red

CT3984-120-0

w/Snap Lock

300 V CAT II