



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

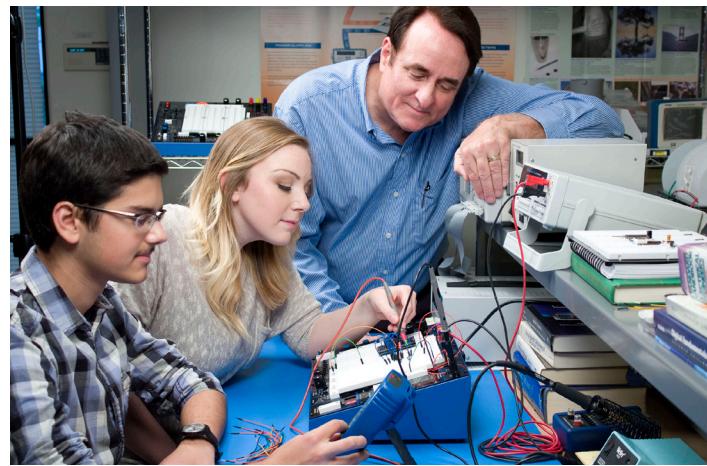
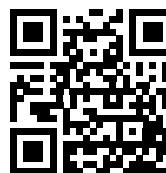


Table of Contents

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.

Cal Test ELECTRONICS

Home > Tools > Test Lead Builder

Test Lead Builder

Select the settings under each tab below. Once you have filled out all of the settings, you will see results with the part number, price, line drawing and availability. You can change your settings to view different results.

WATCH VIDEO

Builder Results: CT3631-320-2

Part Number: CT3631-320-2
Voltage & Current: 600 V CAT II - 20 Amps
Lead Time: 2 - 4 weeks
MSRP (est.): \$20.51 (min. 10 units)

Wire Diagram: Product Model CT3631-320-2

This is the wire diagram of your results for the product CT3631-320-2.

E-MAIL RESULTS **REQUEST QUOTE/PURCHASE**

22820 SAVI RANCH PARKWAY
YORBA LINDA, CA 92877
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Educational Product Line

Global Test Solutions

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Select: **WATCH VIDEO**

New Products.....4-5

Oscilloscope Probes & Accessories.....6

- Active FET7
- Differential8-12
- Passive13-14, 16-21
- High Voltage15
- Current22-23
- Accessories7, 10, 14, 20-21

Digital Multimeter Probes & Accessories.....24

- Probes with Leads25-26
- RF & High Voltage Probes26
- Probe Bodies27-28
- Probe Accessories29
- 3900 Series Probes30-31
- Fused Probes32-33

Clips.....34

- Alligator35-39
- Spring (Crocodile) & Plier Type40
- Telecom & Kelvin41
- SMD Clips42-46
- SMD Tweezers45

Coaxial.....47

- Adapters48-53
- Kits53
- Attenuators54-55
- Terminators55
- Cable Assemblies56
- Cable Breakouts57

Banana Jacks.....58

- In-Line DIY Assembly59
- Panel Mount & Accessories60, 61, 63
- PCB Mount62
- Binding Posts63
- Adapters62

Banana Plugs.....64

- Standard65
- Double66
- Sheath66-67
- Retractable Sleeve68
- Test Leads69-73

Test Lead Wires.....74

- Silicone & PVC Jacketed75
- Test Lead Racks76

Kits.....77

- Power Supply78
- Function Generator & Frequency Counter79
- Spectrum Analyzer80
- Oscilloscope81
- Digital Multimeter82-87

Technical Reference.....88-89

Index90-91

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 American (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

| Model | CT4121 |
|-------|--------|
|-------|--------|



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-S-# |
|-------|------------|
|-------|------------|



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
- Includes tri-fold nylon pouch

For full Specs see page 85

| Model | CT2621C |
|-------|---------|
|-------|---------|



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

| Model | CT2989-S-# |
|-------|------------|
|-------|------------|



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

| Model | CT3203-S-# |
|-------|------------|
|-------|------------|



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



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 |

Oscilloscope Probes

Active FET



New

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 MΩ, 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 MΩ 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

| 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) | ±15 V |
| • Absolute Max Voltage (DC+Peak AC) | ±40 V |
| Output Voltage: | |
| • Swing (into 50 Ω load) | ±1.5 V |
| • Offset (Typical) | <±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 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)

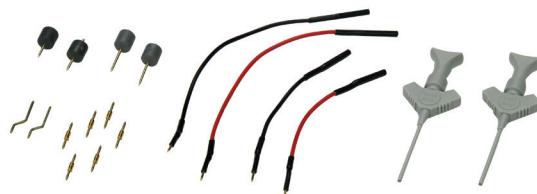


USB Power Lead

| 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

Oscilloscope Probes

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 MHz | |
| Attenuation | 20x/200x | 10x/100x | | 100x/1000x |
| Accuracy | | ±2% | | |
| Risetime | 14 ns | | 3.5 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 | |
| Source Impedance (Typ.) | | 50 kΩ | | |
| CMRR (Typ.) | -86 dB@50 Hz; -66 dB@20 kHz | | -85 dB@50 Hz; -55 dB@1 MHz | |
| Cable Length | | 95 cm | | |
| Input Leads Length | 45 cm | | 30 cm | |
| Weight | 400 g | | 500 g | |
| Dimensions | 170 x 63 x 21 mm | | 202 x 83 x 38 mm | |

Oscilloscope Probes

Differential



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

| *Model | CT4068-NA CT4068-EU |
|-----------------------------------|--|
| Bandwidth | 35 MHz |
| Attenuation | 10x/100x |
| Accuracy | $\pm 2\%$ |
| Risetime | 10 ns |
| Input Impedance | 9 M Ω /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

Oscilloscope Probes

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 $\pm 7,000$ V. Models CT3681 and CT3683 feature 100x/1000x attenuation settings, 70 MHz bandwidth and $\pm 7,000$ 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 | $\pm 2\%$ | |
| Risetime | 5 ns | |
| Input Impedance | 10 M Ω /10 pF | 50 M Ω /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 50 k Ω load) | |
| Offset (Typ.) | ± 5 mV | |
| Noise (Typ.) | 0.9 mVrms | |
| Source Impedance (Typ.) | 50 k Ω | |
| 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 | CT3723 |
|-----------------|--|
| 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 |
| Use with Models | CT2593-1, CT2592-2, CT3681, CT3683, CT3686, CT3687, CT3684, CT3685, CT3688 |

Oscilloscope Probes

Differential



New

High Voltage Differential Probes

ELDITEST Brand

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 ± 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 CT4076-EU | CT4079-NA CT4079-EU | CT4078-NA CT4078-EU | | |
|--|--|----------------------------|---|--|--|
| Bandwidth | 35 MHz | 50 MHz | 120 MHz | | |
| Attenuation | 100x/1000x | 200x/2000x | 30x/100x/300x/1000x/3000x | | |
| Accuracy | $\pm 2\%$ | | | | |
| Risetime | 10 ns | 7 ns | 3 ns | | |
| Input Impedance | 50 M Ω /1.3 pF | 40 M Ω /1.3 pF | 100 M Ω /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 into 50 Ω load) | | ± 5 V (± 2.5 V into 50 Ω load) | | |
| Offset (Typ.) | ≤ 5 mVDC | | | | |
| Noise (Typ.) | ≤ 1 mVrms | < 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 | 350 g | | | | |
| Dimensions | 220 x 85 x 30 mm | | 245 x 76 x 32 mm | | |

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

Oscilloscope Probes

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

| Model | CT3684 | CT3685 | CT3688 |
|-----------------------------------|--------------------------------|----------------------------------|-----------------------------------|
| Bandwidth | 50 MHz | | 200 MHz |
| Attenuation | 10x | 100x | 10x |
| Accuracy | | $\pm 1\%$ | |
| Risetime | 7 ns | | 1.75 ns |
| Input Impedance | 1.6 M Ω //7 pF | 4 M Ω //7 pF | 500 k Ω //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 | $\pm 1,400$ V or 600 Vrms | ± 60 V or 40 Vrms |
| Absolute Max Voltage (DC+Peak AC) | ± 700 V or 600 Vrms CAT II | $\pm 1,400$ V or 600 Vrms CAT II | ± 60 V or 40 Vrms |
| Output Voltage: | | | |
| Swing | ± 7 V | | ± 2 V (into 50 Ω load) |
| Offset (Typ.) | < ± 2 mV | < ± 1 mV | ± 2 mV |
| Noise (Typ.) | 0.7 mVrms | | 0.3 mVrms |
| Source Impedance (Typ.) | | 50 Ω | |
| CMRR (Typ.) | -95 dB@60 Hz; -60 dB@1 MHz | -90 dB@60 Hz; -55 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 | |

Oscilloscope Probes

Passive & Accessories



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

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

| 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.

Oscilloscope Probes

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 |
|-------|-------------|
|-------|-------------|

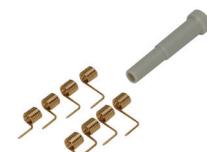
Specialized ground lead. Slip-on ground with 0.6 mm pin jack. Use with SMT Test Clip, CT3659-8. 15 cm long. Color grey. Sold in package of 10.



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 |
|-------|--------|
|-------|--------|

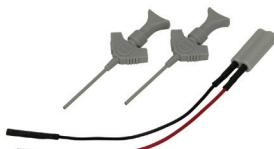
12-piece IC lead comb kit. Blue, .025" lead centers. Gold plated. Sold in package of 1.



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.

Oscilloscope Probes

High Voltage



CT4024



CT2982B



CT4025



CT4026



CT4028

New

High Voltage Probes ELDITEST Brand

ELDITEST high voltage probes allow for safe and accurate 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.

Each probe comes with alternate tips and user manual.

- Meet IEC 61010-031 safety standards
- RoHS (2011/65/EU) compliant



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

| Model | CT4024 | CT2982B | CT4025 | CT4026 | CT4028 |
|--------------------------|--|----------------------|--------------|--------------|----------------|
| Bandwidth | 40 MHz | 50 MHz | 120 MHz | 150 MHz | 220 MHz |
| Attenuation | 1000x | | 100x | 1000x | |
| Input Impedance | | 100 MΩ | | 200 MΩ | 900 MΩ |
| Input Capacitance | 3 pF | | 2 pF | 1.5 pF | 2 pF |
| Output Impedance | | | 1 MΩ | | |
| 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

Model | CT2962A

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



BNC Converter

Model | CT3197B

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

- Bandwidth: DC to 50 MHz
- Meter impedance: 10 Ω
- RoHS (2011/65/EU) compliant

Oscilloscope Probes

Passive



CT3288ARA

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

| Model | CT2678 | CT2676A | CT2676ARA | CT2840RA | CT3133 | CT3133RA | CT3288RA | CT3288ARA* |
|-------------------|--------|---------|-----------|----------------------------|--------|----------|----------|------------|
| Bandwidth | 15 MHz | | 100 MHz | 250 MHz | | 350 MHz | | 500 MHz |
| Attenuation | 1x | | | | 10x | | | |
| Input Impedance | 1 MΩ | | | | 10 MΩ | | | |
| Input Capacitance | 46 pF | | 16 pF | 14 pF | | 12 pF | | |
| Output Impedance | | | | 1 MΩ | | | | |
| Risetime | 27 ns | | 3.5 ns | 1.4 ns | | 1 ns | | 0.7 ns |
| IEC Rating | | | | 300 V CAT II / 600 V CAT 0 | | | | |
| Compensation | -- | | | 10–35 pF | | | 9–18 pF | |
| Cable Length | | | | 1.2 m | | | | |
| Readout Actuator | No | | 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 |

* CT3288ARA includes an enhanced kit described in copy above.

Fixed - 1,200 V Rated

| Model | CT2707 |
|-------------------|---------------|
| Bandwidth | 250 MHz |
| Attenuation | 100x |
| Input Impedance | 100 MΩ |
| Input Capacitance | 6.5 pF |
| Output Impedance | 1 MΩ |
| 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 |



CT2707

Oscilloscope Probes

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 | | 15/100 MHz | 10/200 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 MΩ | | | |
| Input Capacitance | 46/18 pF | 90/16 pF | | 45/16 pF | 90/14 pF | 47/17 pF | 90/14 pF | 90/12 pF |
| Output Impedance | | | | | 1 MΩ | | | |
| 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 | | | | | 10–35 pF | | | |
| Cable Length | | | | | 1.2 m | | | |
| Readout Actuator | | | | | No | | | |
| Insulated BNC | | No | | Yes | No | Yes | | No |

| 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 |

Oscilloscope Probes

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 | | 1x | | | 10x | | |
| Input Impedance | | 1 MΩ | | | 10 MΩ | | |
| Input Capacitance | | 45 pF | | | 12 pF | | 10 pF |
| Output Impedance | | | | 1 MΩ | | | |
| Risetime | 11 ns | 6.4 ns | | 2.3 ns | | 1.4 ns | 0.7 ns |
| IEC Rating | | | | 300 V CAT II | | | |
| Compensation | | No | | | 10–30 pF | | 6–22 pF |
| Cable Length | | | | 1.2 m | | | |
| Readout Actuator | | No | | Yes | No | | Yes |

| 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 | GE1521SA | GE2521 |
|-------------------|------------|--------------|------------|
| Bandwidth | 17/150 MHz | | 25/250 MHz |
| Attenuation | | 1x/10x | |
| Input Impedance | | 1/10 MΩ | |
| Input Capacitance | | 45/12 pF | |
| Output Impedance | | 1 MΩ | |
| 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 |



Oscilloscope Probes

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 than 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

Passive



Fixed - 2,000 V Rated

| Model | GE3125 | GE3121 | GE3225 | GE3231 |
|---------------------------|----------------|----------------|----------------|----------------|
| Bandwidth | 150 MHz | | 200 MHz | |
| Attenuation | | 100x | | |
| Input Impedance | | 100 MΩ | | |
| Input Capacitance | | 5 pF | | |
| Output Impedance | | 1 MΩ | | |
| Risetime | 2.3 ns | | 1.8 ns | |
| IEC Rating | | 2,000 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%) | 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 MΩ | |
| Input Capacitance | 5 pF | |
| Output Impedance | 1 MΩ | |
| 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 |



Oscilloscope Probes

Passive & Accessories

5mm Oscilloscope Probe Accessories

• RoHS (2011/65/EU) compliant.



BNC Adapter

| Model | CT2708 |
|-------|--------|
|-------|--------|

Non-terminated.
Sold in package of 10.



Sprung Hooks

| Model | CT2709A |
|-------|---------|
|-------|---------|

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. 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-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.



Accessory Kit

| 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) Tip Insulator |
| (1) IC Lead 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

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 Color
CT3823-0 Black

Oscilloscope Probes

Current



**CP6990-NA
CP6990-EU**

New

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 CP6220-EU | CP6550-NA CP6550-EU | CP6770-NA CP6770-EU | CP6990-NA 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") | | | |
| 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 | | 310 g w/o battery | |

* Suffix for Power Adapter: – NA North American style plugs

– EU European style plugs

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

| Model | CT3955-100 |
|-------|------------|
|-------|------------|

Model CT3955 is a high quality BNC male to male coaxial insulated cable assembly. Molded bend relief boot. Sold in package of 5.

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 | 25-26 |
| RF & High Voltage Probes..... | 26 |
| Probe Bodies | 27-28 |
| Probe Accessories..... | 29 |
| 3900 Series Probes | 30-31 |
| Fused Probes | 32-33 |

Digital Multimeter Probes

Probes with Leads



CT2789A



CT2900A



CT3985-120



CT3986-120

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



CT3984-120-0

| Model | CT2789A | CT2900A | CT3986-120 | CT3985-120 | CT3984-120-# |
|-----------------------|---------------------------------------|------------------------------------|--|------------------|--------------|
| Type | Set | | | | Individual |
| Tip Diameter x Length | 2 mm (.080") x 19 mm (.75") | | | | |
| Connector | Right Angle, 4 mm Sheath, Banana Plug | | | | |
| IEC Rating | 1,000 V CAT III | | 1,000 V CAT III / 600 V CAT IV w/cap (CAT II w/o cap) | | |
| Current Max | 12 A | | 10 A | | |
| Jacket Material | PVC | | Silicone | | |
| Wire Gauge, AWG | | 18 | | | |
| Stranding (# x Diam.) | | 195 x 0.07 mm | | | |
| Cable OD, mm (in) | | 3.7 mm (.146") | | | |
| Cable Length | 100 cm | | 120 cm | | |
| Color | Black & Red | | | See How to Order | |
| Quantity / Pkg | 1 Pair | | | 10 | |
| Listed | UL | -- | -- | -- | -- |
| Accessory | -- | Alligator Clips 1,000 V CAT III | Sprung Hooks w/Snap Lock 300 V CAT II | -- | -- |

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

Digital Multimeter Probes

Probes with Leads and RF & High Voltage



DMM Probes with Leads Straight Connector

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

- IEC 61010-031 rated
- Silicone lead wires
- RoHS (2011/65/EU) compliant
- See page 30 for additional CT3900 series tip accessories



| Model | CT3982-120 | CT3981-120 | CT3980-120-# |
|----------------------------|--|------------|------------------|
| Type | Set | Individual | |
| Tip Diameter x Length | 2 mm (.080") x 19 mm (.75") | | |
| Connector | Straight, 4 mm Sheath, Banana Plug | | |
| IEC Rating | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o cap) | | |
| Current Max | 10 A | | |
| Jacket Material | Silicone | | |
| Wire Gauge, AWG | 18 | | |
| Stranding (# x Diam.) | 168 x 0.07 mm | | |
| Cable OD, mm (in) x Length | 3.7 mm (.146") x 120 cm | | |
| Color | Black & Red | | See How to Order |
| Quantity / Pkg | 1 Pair | | 10 |
| Accessory | Sprung Hooks w/Snap Lock 300 V CAT II | -- | -- |

| How to Order | Color (-#) |
|--------------|----------------------|
| CT3980-120-# | -0 Black -2 Red |



900 MHz RF DMM Probe

This probe allows a DMM to measure sine-wave AC signals up to 900 MHz with an accuracy of ± 2.0 dB. Slim styled body for easy handling. Output is through 4 mm sheath banana plugs.

- Conversion factor: 1 Veff = 1 VDC on meter
- Accessory kit included
- RoHS (2011/65/EU) compliant

| Model | CT2666A |
|-------------------|-----------------|
| Bandwidth | 100 kHz-900 MHz |
| Input Capacitance | 8 pF |
| Voltage Max | 100 V |
| Accuracy | ± 2.0 dB |
| Max HF Voltage | 30 V |
| Actuation Voltage | 0.35 V |



40 kV High Voltage DMM Probe

The CT2700 High Voltage DMM Probe allows a standard DMM to measure voltages up to 40 kV or 28 kV AC. With a divider ratio of 1,000:1. Output is through 4 mm sheath banana plugs.

- Meets IEC 61010-031 rated: CAT II P2
- RoHS (2011/65/EU) compliant

| Model | CT2700 |
|------------------------|---------------------------------|
| Input Impedance | 1 k Ω |
| Voltage Max | 40 kV / 28 kV |
| Accuracy | ± 2 % (+1 % to 20 kV AC) |
| Temp. Coff., ppm/deg C | 200 ppm/deg C |
| Meter Impedance | 10 M Ω Min. |

Digital Multimeter Probes

Probe Bodies



DMM 4mm Banana Plug Probe Bodies

General purpose test probe bodies with 4 mm banana plug contacts on tips. Model CT2268 features exchangeable 2 mm tips.

- IEC 61010-031 rated
- Connector 4 mm banana jack
- RoHS (2011/65/EU) compliant

| Model | CT2483 | CT2265-# | CT3776 | CT3775-# | CT2268 |
|----------------|---|------------------|----------------|------------------|---|
| Type | Set | Individual | Set | Individual | Set |
| Tip Type | 4 mm Banana | | | | |
| IEC Rating | 1,000 V CAT III w/cap, (CAT II w/o cap) | | 1,000 V CAT II | | 1,000 V CAT III w/cap, (CAT II w/o cap) |
| Current Max | 36 A | | 10 A | | 36 A |
| Body Style | Standard | | Compact | | Standard |
| Body Length | 3.8" (96 mm) | | 2.9" (74 mm) | | 3.8" (96 mm) |
| Color | Black & Red | See How to Order | Black & Red | See How to Order | Black & Red |
| Quantity / Pkg | 1 Pair | 10 | 1 Pair | 10 | 1 Pair |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2265-# | -0 Black | -2 Red |
| CT3775-# | -0 Black | -2 Red |

| Model | CT2664 | CT2576-# |
|--------------------|----------------------------------|------------------|
| Type | Set | Individual |
| Hooks to Wires | Up to .140" Diameter | |
| Connector | Fits Probe with 4 mm Banana Plug | |
| IEC Rating | 30 VAC / 60 VDC | |
| Current Max | 5 A | |
| Color | Black & Red | See How to Order |
| Quantity / Package | 1 pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2576-# | -0 Black | -2 Red |



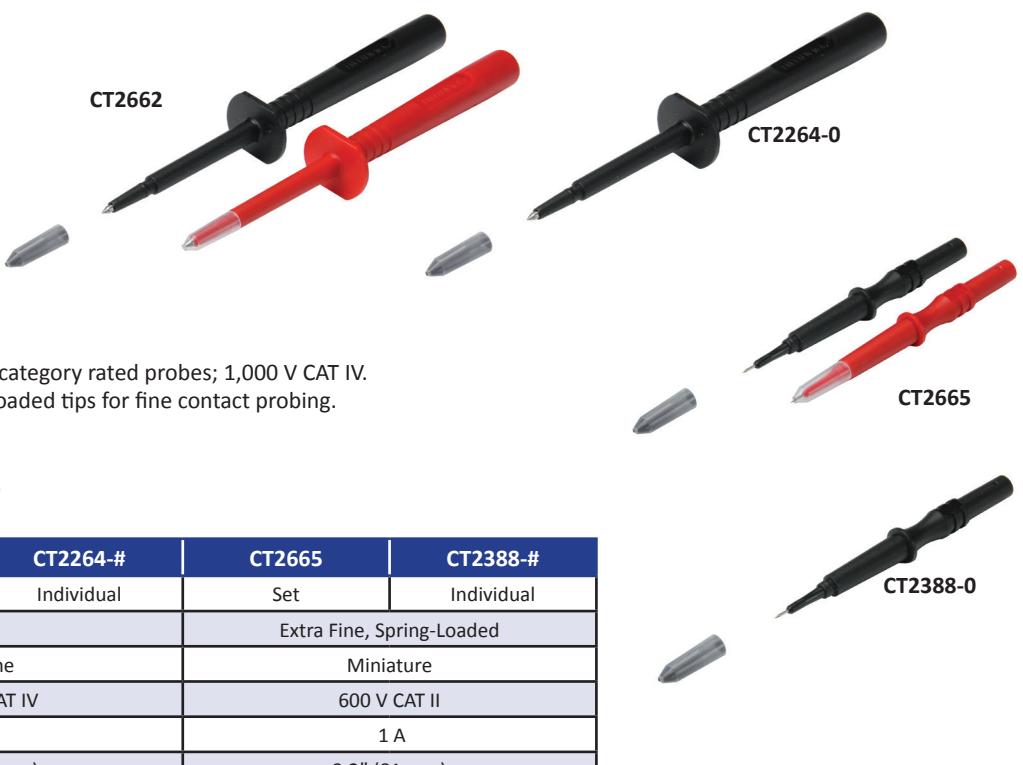
Sprung Hooks

Intended for probes with 4 mm banana plug contacts. Adds the convenience of hook connection to your probes.

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

Digital Multimeter Probes

Probe Bodies



DMM Fine & Extra Fine Tip Probe Bodies

Models CT2662 / CT2264-# are our highest category rated probes; 1,000 V CAT IV.
Models CT2662 / CT2388-# feature spring-loaded tips for fine contact probing.

- IEC 61010-031 rated
- Connector is 4 mm banana jack
- Probes come with clear, removable IC Cap
- RoHS (2011/65/EU) compliant

| Model | CT2662 | CT2264-# | CT2665 | CT2388-# |
|-------------------|----------------|------------------|-------------|------------------|
| Type | Set | Individual | Set | Individual |
| Tip Style | Fine | | | |
| Body Style (Size) | Slim Line | | | |
| IEC Rating | 1,000 V CAT IV | | | |
| Current Max | 16 A | | | |
| Body Length | 5.4" (136 mm) | | | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order |
| Quantity / Pkg | 1 Pair | 10 | 1 Pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2264-# | -0 Black | -2 Red |
| CT2388-# | -0 Black | -2 Red |

DMM 2mm Probe Bodies

General purpose test probe bodies with 2 mm (.080") diameter pin tips

- IEC 61010-031 rated
- Connector is 4 mm banana jack
- Tip fits North American blade contact power sockets
- RoHS (2011/65/EU) compliant

| Model | CT2988 | CT2266-# |
|-----------------------|-----------------------------|------------------|
| Type | Set | Individual |
| Tip Diameter x Length | 2 mm (.080") x 19 mm (.75") | |
| IEC Rating | 1,000 V CAT II | |
| Current Max | 36 A | |
| Body Style (Size) | Standard | |
| Body Length | 3.8" (96 mm) | |
| Color | Black & Red | See How to Order |
| Quantity / Pkg | 1 Pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2266-# | -0 Black | -2 Red |



Digital Multimeter Probes

Probe Accessories



CT2661



CT2663



CT3089



CT2553-2



CT2248-2



CT2473-2

Spade Lugs, Splices & Banana Plug Adapters

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

| Model | CT2661 | CT2553-# | CT2663 | CT2248-# | CT3089 | CT2473-# |
|--------------------|--|------------------|---|------------------|--|------------------|
| Type | Set | Individual | Set | Individual | Set | Individual |
| Adapter | Spade Lug Adapter | | Insulated Splice | | Banana Plug Adapter | |
| Connector | 6/4 mm Lug to 4 mm Sheath Banana Jack | | 4 mm Sheath Banana Jack to 4 mm Sheath Banana Jack | | 4 mm Banana Plug to 4 mm Sheath Banana Jack | |
| Accepts | Accepts 4 mm Sheath Banana Plug | | Accepts Two 4 mm Sheath Banana Plug | | Accepts 4 mm Sheath Banana Plug | |
| IEC Rating | 30 VAC / 60 VDC | | 1,000 V CAT III | | 30 VAC / 60 VDC | |
| Current Max | 36 A | | 10 A | | 10 A | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order | Black & Red | See How to Order |
| Quantity / Package | 1 pair | 10 | 1 pair | 10 | 1 pair | 10 |

| How to Order | Color (-#) | | | | | | |
|--------------|------------|----------|-----------|-----------|----------|----------|----------|
| | CT2553-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2248-# | -0 Black | -2 Red | -- | -- | -- | -- | -- |
| CT2473-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White | |



Tri-Fold Accessory Pouch

| Model | CT3041 |
|--|--------|
| • Size: 7"W x 5"H closed 7"W x 16"H open | |

- Size:
7"W x 5"H closed
7"W x 16"H open
- 3 hook & loop locked 6"W x 3"H pockets w/clear viewing panel.
- Nylon, black

Digital Multimeter Probes

3900 Series Probes & Tip Accessories

Complete Kit of Probe Adapter Pairs

| Model | CT3948 |
|-------|--------|
|-------|--------|

- Snap-locks to probe bodies
- 4 styles of adapters
- Convenient black and red pairs
- Packaged in polybag
- RoHS (2011/65/EU) compliant



Probe Bodies with Fixed Tip and Safety Cap + Accessory Adapters

| Model | CT3978 |
|-------|--------|
|-------|--------|

- Probe bodies accept 4 mm sheath banana plugs
- Cap on probe tip provides CAT III / CAT IV rating
- Standard 2 mm x 19 mm probe tips
- All accessories snap-lock to probe bodies
- Convenient black and red pairs
- RoHS (2011/65/EU) compliant

| Kit Contains | |
|--|--|
| (2) Probe Bodies, (1) Black, (1) Red - (CT3975) | |
| (2) Sprung Hooks, (1) Black, (1) Red - (CT3947) | |
| (2) Alligator Clips, (1) Black, (1) Red - (CT3943) | |
| (2) Spade Lugs, (1) Black, (1) Red - (CT3945) | |
| (2) Extended Tips, (1) Black, (1) Red - (CT3941) | |
| Rating | |
| Probe Bodies | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Sprung Hooks | 300 V CAT II, 3 A |
| Alligator Clips | 300 V CAT II, 5 A |
| Spade Lugs | <30 VAC / <60 VDC, 5 A |
| Extended Tips | 300 V CAT II, 3 A |

Probe Bodies with Fixed Tip with Safety Cap + Spring Hooks

| Model | CT3976 |
|-------|--------|
|-------|--------|

- Standard 2 mm x 19 mm probe tips
- Sprung hooks snap-lock to probe bodies
- Probe bodies accept 4 mm sheath banana plugs
- Cap on probe tip provides CAT III / CAT IV rating
- Convenient black and red pairs
- RoHS (2011/65/EU) compliant



Probe Safety Cap

| Model | CT3994-8 |
|-------|----------|
|-------|----------|



- Safety cap snap-locks to probe body
- Allows probes to meet latest safety standards
- Color: grey
- Sold 25/pkg.
- RoHS (2011/65/EU) compliant

| Kit Contains | |
|---|--|
| (2) Probe Bodies, (1) Black, (1) Red - (CT3975) | |
| (2) Sprung Hooks, (1) Black, (1) Red - (CT3947) | |
| Rating | |
| Probe Bodies | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Sprung Hooks | 300 V CAT II, 3 A |

Digital Multimeter Probes

Fused Probes



CT3999

New

Fused Probes

ELDITEST Brand

The CT399x series fused probes enhance user safety when working in high energy CAT III and CAT IV environments. The replaceable fuse provides fast interrupt in fault conditions. The probes feature a $1\text{ M}\Omega$ resistor in parallel with the fuse. Although it is recommended to check for a blown fuse before and after the measurement, if the probe is used with a blown fuse, the parallel resistor will provide a 90% accurate measurement thereby avoiding a "zero" instrument reading when there is a hazardous voltage present.

- IEC 61010-031 rated
- Replaceable 1,000 VAC / VDC, 11 A, 20 kA IR fast-acting fuse
- 1,000 V CAT III / 600 V CAT IV IEC voltage rating w/protective cap
- 4 mm banana plug tip, removable for a 2 mm pin tip for both CT3997 and CT3999
- Special circuit to prevent hazardous "zero" reading in blown fuse situation
- RoHS (2011/65/EU) compliant



CT3997-2



4 mm plug removable
for 2 mm pin tip

| Model | CT3999 | CT3997-# |
|-----------------------|--|------------------|
| Description | Probe Set | Probe Body |
| Type | Set | Individual |
| Probe Tip Diameter | 4 mm Banana Plug Spring Tip; Removable for 2 mm (.080") | |
| Connector | Right-Angle Sheath 4 mm Banana Plug | 4 mm Banana Jack |
| IEC Rating | 1,000 V CAT III / 600 V CAT IV w/ Protective Cap | |
| Current Max | 11 A | |
| Interrupting Rating | 20 kA | |
| Replacement Fuse | CT3998-11A (Fast Acting) | |
| Jacket Material | Silicone | N/A |
| Wire Gauge, AWG | 18 | N/A |
| Stranding (# x Diam.) | 168 x 0.07 mm | N/A |
| Cable OD, mm (in) | 3.7 mm (.146") | N/A |
| Cable Length | 150 cm | N/A |
| Color | Black & Red | See How to Order |
| Quantity / Pkg | 1 Pair | 1 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT3997-# | -0 Black | -2 Red |

New



Replacement Fuses for Fused Probes

- 10 x 38 mm
- For fused probes shown above
- Fast acting ceramic
- RoHS (2011/65/EU) compliant

| Model | CT3998-11A |
|---------------------|------------|
| Voltage Max | 1,000 V |
| Current Max | 11 A |
| Interrupting Rating | 20 kA |
| Approvals | UL / CSA |
| Quantity / Pkg | 2 |

Digital Multimeter Probes

Fused Probes

DMM Fused Probe Bodies

Banana Plug Tip with

Spring-Loaded Sheath + Safety Cap

Fused probe bodies enhance user safety when working in high energy CAT III and CAT IV environments. The replaceable fuse provides fast interrupt in fault conditions. The probe bodies feature a replaceable 6 x 32 mm fast-acting ceramic fuse in three current ranges. Tips have 4 mm banana plug contacts with a protective spring-loaded sleeve for a CAT II rating, plus an additional protective cap providing CAT III and IV rating. The probe bodies (4.5" 115 mm long) are available individually or in black and red pairs.

- IEC 61010-031 rated
- Replaceable fast-acting ceramic fuses
- 1,000 V CAT III / 600 V CAT IV IEC voltage rating w/protective cap
- 4 mm banana plug tip with spring-loaded sleeve
- Connector: sheath 4 mm banana jack
- RoHS (2011/65/EU) compliant



| Model | CT3146 | CT3145-# | CT3210 | CT3209-# | CT3212 | CT3211-# |
|----------------------------|---|------------------|-------------|------------------|-------------|------------------|
| Type | Set | Individual | Set | Individual | Set | Individual |
| IEC Rating | 1,000 V CAT III w/cap, (CAT II w/o cap) | | | | | |
| Voltage (fuse) | 600 V | | 660 V | | 1,000 V | |
| Current Max (fuse) | 10 A | | 500 mA | | | |
| Interrupting Rating (fuse) | 50 kA | | 30 kA | | 50 kA | |
| Replacement Fuse | CT3194 | | CT3195 | | CT3196 | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order | Black & Red | See How to Order |
| Quantity / Pkg | 1 Pair | 5 | 1 Pair | 5 | 1 Pair | 5 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT3145-# | -0 Black | -2 Red |
| CT3209-# | -0 Black | -2 Red |
| CT3211-# | -0 Black | -2 Red |

| Model | CT3194 | CT3195 | CT3196 |
|---------------------|--------|--------|---------|
| Voltage Max | 600 V | 660 V | 1,000 V |
| Current Max | 10 A | 500 mA | |
| Interrupting Rating | 50 kA | 30 kA | 50 kA |
| Quantity / Pkg | 10 | | |

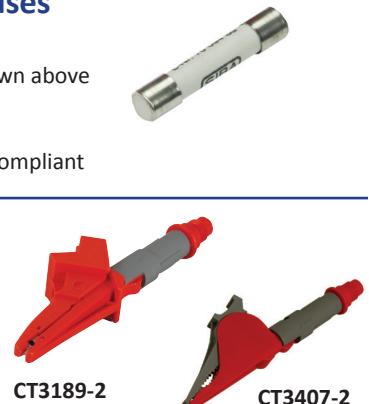
Replacement Fuses

- 6 x 32 mm
- For fused probes shown above
- Fast acting ceramic
- UL / CSA approved
- RoHS (2011/65/EU) compliant



| Model | CT3208 | CT3189-# | CT3408 | CT3407-# |
|----------------|-----------------|------------------|-------------|------------------|
| Type | Set | Individual | Set | Individual |
| Size | Large | | | |
| IEC Rating | 1,000 V CAT III | | | |
| Current Max | 20 A | | 36 A | |
| Resistance Max | 20 mΩ | | | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order |
| Qty / Package | 1 Pair | 5 | 1 Pair | 5 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT3189-# | -0 Black | -2 Red |
| CT3407-# | -0 Black | -2 Red |



Alligator Clips for Fused Probes, Insulated

- IEC 61010-031 rated
- With thread for assembly to fused probe bodies
- RoHS (2011/65/EU) compliant

Clips



Clips

A complete offering of the most popular electrical and electronic test clips including alligator, miniature alligator, spring (crocodile), plier type, telecom, and Kelvin. This section also includes SMD test clips, MicroClips, MiniFlex, MiniPro and SMD tweezers.

Product tables include cross reference to *Mueller clips.

| | |
|--------------------------|-------|
| Alligator | 35-39 |
| Spring (Crocodile) | 40 |
| Plier Type | 40 |
| Telecom | 41 |
| Kelvin | 41 |
| SMD Clips | 42-46 |
| SMD Tweezers | 45 |

* Mueller is the registered trademark of Mueller Electric Co.

Alligator



CTM-34



CTM-30



CTM-30BL



CTM-30TBO



CTM-60CS



CTM-60U



CTM-60TBO

Uninsulated

- RoHS (2011/65/EU) compliant

| Model | CTM-34 | CTM-34C | CTM-30 | CTM-30C | CTM-30BL | CTM-30TBO | CTM-60CS | CTM-60S | CTM-60U | CTM-60TBO | CTM-60 | CTM-60C | CTM-60X | | |
|-----------------|------------------|--------------|------------------|---------------|---------------------|--------------|-------------------------------|------------------|------------|---------------------|-------------------------------|-----------------|---------|--|--|
| Size | Micro | | Miniature | | | | | | | | Standard | | | | |
| Max Jaw Opening | .22" (5.6 mm) | | .188" (4.8 mm) | | | | | | | | .31" (7.9 mm) | | | | |
| Length | 1.1" (28 mm) | | | 1.25" (32 mm) | | 1.5" (39 mm) | 1.97" (50 mm) | | | 2.13" (54 mm) | 2.23" (57 mm) | | | | |
| Current Max | 5 A | | | | | | 10 A | | | | | | | | |
| Material | Steel, Zinc Plt. | Solid Copper | Steel, Zinc Plt. | Solid Copper | Steel, Zinc Plt. | | Solid Copper | Steel, Zinc Plt. | | | Solid Copper | Stainless Steel | | | |
| Barrel | None | | | 1/8" ID | Internally Threaded | | 4 mm Accepts Std. Banana Plug | None | | Internally Threaded | 4 mm Accepts Std. Banana Plug | | | | |
| Connection | Solder or Crimp | | Solder | | | 6-32 UNC | Solder or Crimp Plus Screw | | Crimp Slot | 6-32 UNC | Solder or Crimp | | | | |
| Mueller Cross | BU-34 | BU-34C | BU-30 | BU-30C | BU-30BL | BU-30TBO | BU-60CS | BU-60S | BU-60U | BU-60TBO | BU-60 | BU-60C | BU-60X | | |
| Use Insul. Boot | CTM-36 | | CTM-32 | | CTM-31 | | CTM-62 | | | | | | | | |
| Qty / Pkg | 100 | | | | | | | | | | | 50 | | | |

Insulating Boots

- RoHS (2011/65/EU) compliant



| Model | Length | Material | Color | Fit these Clips | Mueller Cross | Quantity / Package |
|----------|---------------|----------|------------------|---|---------------|--------------------|
| CTM-62-# | 2.03" (52 mm) | PVC | See How to Order | CTM-60, -60C, -60CS, -60PR2, -60S, -60TBO, -60U, and -60X | BU-62-* | 100 |

| How to order | Colors (-#) | | | | | |
|--------------|-------------|--------|-----------|----------|---------|----------|
| CTM-62-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |

Clips

Alligator

| Model | CTM-63-# | CTM-63C-# |
|------------------------|--------------------|--------------|
| Max Jaw Opening | .31" (7.9 mm) | |
| Length | 2.23" (57 mm) | |
| Current Max | 10 A | |
| Material | Steel, Nickel Plt. | Solid Copper |
| Insulation | 2-Piece Flex. PVC | |
| Mueller Cross | BU-63-* | BU-63C-* |
| Color | How to Order | |
| Qty / Pkg | 100 | |



Insulated

- Accept 4 mm banana plug
- RoHS (2011/65/EU) compliant

| How to Order | Color (-#) | | | | | |
|--------------|------------|--------|-----------|----------|---------|----------|
| CTM-63-# | -0 Black | -2 Red | -- | -- | -- | -- |
| CTM-63C-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |

CT3810-60



CT3809-60-2



CT2394



Test Leads

- IEC 61010-031 rated
- Test leads feature an alligator clip at each end
- RoHS (2011/65/EU) compliant

| Model | CT3810-L | CT3809-L-# | CT2394 |
|------------------------|--------------------------|------------------|--|
| Type | Set | Individual | Kit |
| Both Ends | Insulated Alligator Clip | | |
| Alligator Jaws Open to | .31" (7.9 mm) | | |
| Alligator Clip | Steel, Nickel Plt. | | |
| Boot | PVC | | |
| IEC Rating | 300 V CAT II | | 30 VAC / 60 VDC |
| Current Max | 10 A | | 5 A |
| Jacket Material | Silicone | | PVC |
| Wire Gauge | 18 AWG | | 21 AWG |
| Stranding (# x Diam.) | 168 x 0.07 mm | | 104 x 0.07 mm |
| OD | 3.7 mm (.146") | | 2.0 mm (.079") |
| Length | See How to Order | | 50 cm |
| Color | Black & Red | See How to Order | 2 Black, 2 Red, 1 Yellow, 1 Green, 1 Blue, 1 White |
| Qty / Pkg | 1 Pair | 10 | 8-piece Kit |

How to Order

| CT3809-L-# | Length cm (-L) | | |
|------------|----------------|--------|------|
| | -30 | -60 | -100 |
| | Color (-#) | | |
| CT3810-L | -0 Black | -2 Red | -- |
| | Length cm (-L) | | |
| | -30 | -60 | -100 |



CTM-652-2



CTM-65-2



CT2490A



CT2392A-2



CT3286



CT3251-2



CT3438-2



CT3449



CT3441-2

Fully Insulated

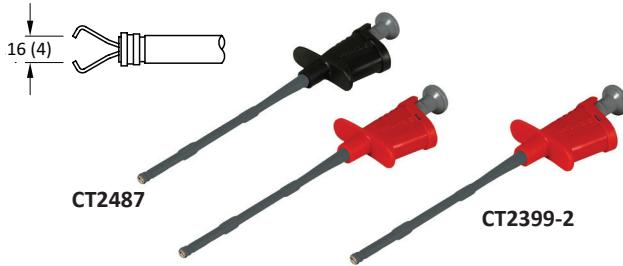
- IEC 61010-031 rated
- RoHS (2011/65/EU) compliant

| Model | CTM-652-# | CTM-65-# | CT2490A | CT2392A-# | CT3286 | CT3251-# | CT3438-# | CT3449 | CT3441-# |
|-----------------|--------------------------------|-------------------|--------------------------------|------------------|---------------|------------------|------------------|--|------------------|
| Connector | 4 mm Sheath Banana Jack | | | | | | | 8-32 UNC Internal Thread, IP2X Finger Safe | |
| Type | Individual | | Set | Individual | Set | Individual | Individual | Set | Individual |
| Size | Small | Large | | Extra Large | | Large | Extra Large | | |
| Max Jaw Opening | .27" (7 mm) | .75" (19 mm) | .96" (25 mm) | | 1.26" (32 mm) | .96" (25 mm) | 1.26" (32 mm) | | |
| Length | 3.23" (82 mm) | | 3.58" (91 mm) | | 3.62" (92 mm) | 3.58" (91 mm) | 4.33" (110 mm) | | |
| IEC Rating | 1,000 V CAT III / 600 V CAT IV | 1,000 V / CAT III | 1,000 V CAT III / 600 V CAT IV | | | | | | |
| Current Max | 20 A | 30 A | 20 A | | 36 A | | 20 A | 36 A | |
| Mueller Cross | BU-652-* | BU-65-* | -- | -- | -- | -- | -- | -- | -- |
| Color | See How to order | | Black & Red | See How to order | Black & Red | See How to order | See How to order | Black & Red | See How to order |
| Qty / Pkg | 10 | | 1 Pair | 10 | 1 Pair | 10 | 10 | 1 Pair | 5 |

| How to Order | Color (-#) | | | | | | | | |
|--------------|------------|----------|--------|-----------|----------|---------|---------|-----------|----------|
| CTM-652-# | -0 Black | -- | -2 Red | -- | -- | -- | -- | -- | -- |
| CTM-65-# | -0 Black | -- | -2 Red | -- | -- | -- | -- | -- | -- |
| CT2392A-# | -0 Black | -1 Brown | -2 Red | -4 Yellow | -5 Green | -6 Blue | -- | -- | -9 White |
| CT3251-# | -0 Black | -1 Brown | -2 Red | -4 Yellow | -5 Green | -6 Blue | -8 Grey | -7 Violet | -9 White |
| CT3438-# | -0 Black | -- | -2 Red | -- | -- | -- | -- | -- | -- |
| CT3441-# | -0 Black | -- | -2 Red | -- | -- | -- | -- | -- | -- |

Clips

Pincer, Hook & Alligator



Pincer Style Clips, Flexible

Pincer can be rotated for easy connection, and flexible shaft is bendable to 90 degrees.

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

| Model | CT2487 | CT2399-# |
|--------------------------------|----------------------------------|------------------|
| Type | Set | Individual |
| Interconnect | 4 mm Sheath Banana Jack | |
| IEC Rating | 1,000 V CAT II | |
| Current Max | 6 A | |
| Grasps Terminal Diameter up to | 4 mm (.16") | |
| Body Insulation | Polyamide (Nylon) and Santoprene | |
| Contacts | Brass, Nickel Plated | |
| Color | Black & Red | See How to Order |
| Length | 6" | |
| Quantity / Pkg | 1 Pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2399-# | -0 Black | -2 Red |



Hook Style Clips, Flexible

Hook can be rotated for easy connection, and flexible shaft is bendable to 90 degrees.

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

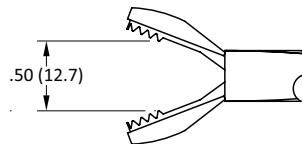
| Model | CT2489 | CT2401-# |
|--------------------------------|----------------------------------|------------------|
| Type | Set | Individual |
| Interconnect | 4 mm Sheath Banana Jack | |
| IEC Rating | 1,000 V CAT II | |
| Current Max | 6 A | |
| Grasps Terminal Diameter up to | 5 mm (.20") | |
| Body Insulation | Polyamide (Nylon) and Santoprene | |
| Contacts | Brass, Nickel Plated | |
| Color | Black & Red | See How to Order |
| Length | 6" | |
| Quantity / Pkg | 1 Pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2401-# | -0 Black | -2 Red |

Pincer, Hook & Alligator

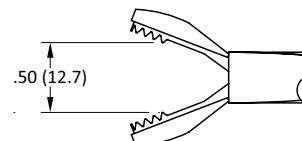
| Model | CT2488 | CT2400-# |
|--------------------------------|----------------------------------|------------------|
| Type | Set | Individual |
| Interconnect | 4 mm Sheath Banana Jack | |
| IEC Rating | 1,000 V CAT III | |
| Current Max | 6 A | |
| Grasps Terminal Diameter up to | 12.7 mm (.50") | |
| Body Insulation | Polyamide (Nylon) and Santoprene | |
| Contacts | Brass, Nickel Plated | |
| Color | Black & Red | See How to Order |
| Length | 6" | |
| Quantity / Pkg | 1 Pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2400-# | -0 Black | -2 Red |

Alligator Style Clips
Flexible

Insulation on alligator contact protects against shorting.

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

Alligator Style Clips
Rigid

Rigid housing allow increased current capacity. Insulation on jaw contacts protects against shorting.

- IEC 61010-031 rated
- Fully insulated
- Ideal for high current applications
- RoHS (2011/65/EU) compliant

| Model | CT2966 | CT2965-# |
|--------------------------------|-------------------------|------------------|
| Type | Set | Individual |
| Interconnect | 4 mm Sheath Banana Jack | |
| IEC Rating | 1,000 V CAT III | |
| Current Max | 20 A | |
| Grasps Terminal Diameter up to | 12.7 mm (.50") | |
| Body Insulation | Polyamide (Nylon) | |
| Contacts | Brass, Nickel Plated | |
| Color | Black & Red | See How to Order |
| Length | 6" | |
| Quantity / Pkg | 1 Pair | 5 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT2965-# | -0 Black | -2 Red |

| Model | CT3762 | CT3761-# | CT3760 | CT3759-# | CT3756 | CT3755-# |
|-----------------|------------------|------------------|----------------------|------------------|--------------------------|------------------|
| Type | Set | Individual | Set | Individual | Set | Individual |
| Interconnect | 4 mm Banana Jack | | 2 mm Banana Jack | | 8-32 UNC Internal Thread | |
| IEC Rating | | | 300V CAT II, 10 A | | | |
| Jaw Opens to | | | 7.9 mm (.31") | | | |
| Body Insulation | | | PVC | | | |
| Contacts | | | Steel, Nickel Plated | | | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order | Black & Red | See How to Order |
| Quantity / Pkg | 1 Pair | 10 | 1 Pair | 10 | 1 Pair | 10 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT3761-# | -0 Black | -2 Red |
| CT3759-# | -0 Black | -2 Red |
| CT3755-# | -0 Black | -2 Red |

Alligator Clips
Standard Jaw

- IEC 61010-031 rated
- Fully insulated
- Standard jaw
- RoHS (2011/65/EU) compliant

Clips

Spring & Plier Type



CTM-27



CTM-25



CTM-21APN



CTM-21CPN

Spring Clips (Crocodile), Uninsulated

Automotive & Heavy Duty

- RoHS (2011/65/EU) compliant

| Model | CTM-27 | CTM-25 | CTM-21APN | CTM-21CPN |
|--------------------|------------------|--------------|-----------|----------------|
| Style | Automotive | | | Heavy Duty |
| Type | General Purpose | | | Shunted |
| Max Jaw Opening | .625" (16 mm) | .75" (19 mm) | | |
| Length | 2.44" (62 mm) | 3" (76.2 mm) | | 4.11" (104 mm) |
| Current Max | 20 A | 40 A | 50 A | 100 A |
| Material | Steel, Zinc Plt. | | | Solid Copper |
| Marking | None | | | |
| Connection | Crimp or Screw | | | Solder Lug |
| Mueller Cross | BU-27 | BU-25 | BU-21APN | BU-21CPN |
| Use Insul. Boot | CTM-29 | CTM-26 | CTM-23 | |
| Quantity / Package | 50 | | 25 | 10 |

Spring Clip (Crocodile) Insulating Boots

- Material: PVC
- RoHS (2011/65/EU) compliant



CTM-23-2



CTM-26-0



CTM-29-6

| Model | Type | Length | Color | Fit these Clips | Mueller Cross | Quantity / Package |
|----------|------------|---------------|------------------|--|---------------|--------------------|
| CTM-23-# | Heavy Duty | 5" (127 mm) | See How to Order | CTM-21A, CTM-21C | BU-23-* | 25 |
| CTM-26-# | Automotive | 3.88" (98 mm) | See How to Order | CTM-24A, CTM-25, CTM-25C | BU-26-* | 50 |
| CTM-29-# | Geophone | 3.5" (89 mm) | See How to Order | CTM-27, CTM-27C CTM-27CG, CTM-27CGW | BU-29-* | 50 |

| How to Order | Colors (-#) | | | | | |
|--------------|-------------|--------|-----------|----------|---------|----------|
| CTM-23-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CTM-26-# | -0 Black | -2 Red | -- | -- | -- | -- |
| CTM-29-# | -0 Black | -2 Red | -- | -- | -- | -- |



Miniature

Plier Type Clips

Plier type clips utilized by the automotive industry for battery chargers, timing lights, jumper cables, and smaller applications.

- Partially insulated
- RoHS (2011/65/EU) compliant

| Model | CTM-46A-# |
|-----------------|--------------------|
| Used For | Battery Work |
| Max Jaw Opening | 1.125" (29 mm) |
| Length | 2.88" (98 mm) |
| Current Max | 50 A |
| Material | Steel, Copper Plt. |
| Connection | Solder or Crimp |
| Mueller Cross | BU-46A-* |
| Color | See How to Order |
| Qty / Pkg | 50 |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CTM-46A-# | -0 Black | -2 Red |

| Model | Type and Insulation Piercing | Material | Jaws Open up to | Length | Mueller Cross | Qty / Pkg |
|----------|--|---------------|-----------------|---------------|---------------|-----------|
| CTM-8783 | Angle Nose w/Bed of Nails and Single Spike | Nickel Silver | 1" (25.4 mm) | 2.61" (66 mm) | JP-8783 | 10 |



Telecom Clip

- Screw and washer connection included
- RoHS (2011/65/EU) compliant



Telecom Clip Insulators

- High quality PVC. Durable and flexible.
- RoHS (2011/65/EU) compliant

| Model | Length | Material | Color | Fit these Clips* | Mueller Cross | Qty / Pkg |
|------------|--------------|----------|------------------|------------------|---------------|-----------|
| CTM-8681-# | 2.4" (61 mm) | PVC | See How to Order | See below | JP-8681-* | 100 |

* Fits these Clips: CTM-25, CTM-8078, CTM-8099, CTM-8783, CTM-33674 & CTM-33699

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CTM-8681-# | -0 Black | -2 Red |

Kelvin Clips

Kelvin Clips are used to perform four-terminal sensing and are also known as Kelvin sensing. This 4-wire sensing, or 4-point probe method, is an electrical impedance measuring technique that uses separate pairs of current-carrying and voltage-sensing electrodes to make more accurate measurements than traditional two-terminal (2T) sensing. A Kelvin Clip, is often a crocodile clip, that connects a force-and-sense pair when it closes onto a conductor.



Kelvin Clip with Isolated Jaws

| Model | CTM-78K |
|-------|---------|
|-------|---------|

Metrology grade Kelvin clip features a current path for the source and a circuit path for the sense.

Features:

- Material: brass, gold plated
- Jaws open to .50" (12.7 mm)
- Length: 2.28" (58 mm)
- Current max: 10 A
- RoHS (2011/65/EU) compliant
- Mueller cross: BU-78K
- Sold in package of 1



Small Insulated Kelvin Clip with Isolated Jaws

| Model | CTM-75K |
|-------|---------|
|-------|---------|

Features:

- Material: nickel silver, gold tips; nylon
- Jaws open to .31" (7.9 mm)
- Length: 1.625" (41 mm)
- Screw wire connection
- Current max: 10 A
- RoHS (2011/65/EU) compliant
- Mueller cross: BU-75K
- Sold in package of 10

Clips

SMD Clips



MicroClip Test Clips

- IEC 61010-031 rated
- Access ICs down to 0.20 mm wide on a 0.45 mm pitch
- Steel pincers open up to .024" (0.6 mm) can be rotated by hand to desired attachment position
- Interconnection pin .031" (0.8 mm)
- Use with MicroLead test leads
- Material: polyamide (Nylon) with stainless steel contacts
- RoHS (2011/65/EU) compliant

| Model | CT3100 | CT2845-# |
|-------------|-----------------|------------------|
| Type | Set | Individual |
| IEC Rating | 30 VAC / 60 VDC | |
| Current Max | 0.5 A | |
| Color | Black & Red | See How to Order |
| Qty / Pkg | 1 Pair | 10 |

| How to Order | Color (-#) | | | | | | |
|--------------|------------|----------|--------|-----------|----------|---------|----------|
| | CT2845-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |

MicroClip Test Clip

Holding Rod

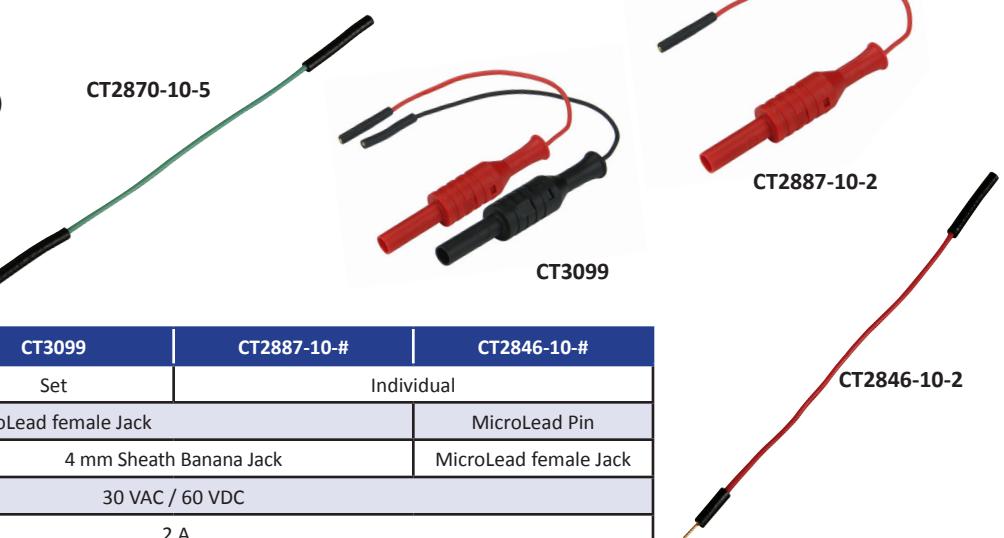
| Model | CT2847 |
|-------|--------|
| | |

Two-piece holding rod to group MicroTest clips together when stacked side-by-side.
• RoHS (2011/65/EU) compliant



MicroLead Test Leads

- IEC 61010-031 rated
- Interconnection (pin or jack) .031" (0.8 mm)
- Highly flexible silicone jacketed
- Wire gauge: 24 AWG; OD: 1.4 mm (.055")
- Conductor area: 0.22 mm²
- Stranding: 7 x 0.20 mm
- Material: brass, gold plt.
- Length: 10 cm
- RoHS (2011/65/EU) compliant



| Model | CT2870-10-# | CT3099 | CT2887-10-# | CT2846-10-# | | |
|-------------|-----------------------|-------------------------|------------------|-----------------------|--|--|
| Type | Individual | Set | Individual | | | |
| One End | MicroLead female Jack | | | MicroLead Pin | | |
| Other End | MicroLead female Jack | 4 mm Sheath Banana Jack | | MicroLead female Jack | | |
| IEC Rating | 30 VAC / 60 VDC | | | | | |
| Current Max | 2 A | | | | | |
| Color | See How to Order | Black & Red | See How to Order | | | |
| Qty / Pkg | 10 | 1 Pair | 10 | | | |

| How to Order | Color (-#) | | | | | | |
|--------------|-------------|----------|-----------|----------|---------|----------|----|
| | CT2870-10-# | -0 Black | -2 Red | -- | -- | -- | -- |
| CT2887-10-# | -0 Black | -2 Red | -- | -- | -- | -- | -- |
| CT2846-10-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White | |

CT2848-6



CT2848-8



MicroClip Test Clip Kits

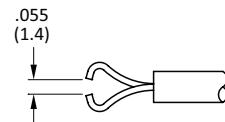
Kits include SMD MicroTest clips, interconnecting MicroLeads (male to female), holding rods, and come complete with plastic storage box.

- Use MicroLeads to interconnect the MicroTest clips to an instrument
- IEC 61010-031 rated: 30 VAC / 60 VDC
- Current max: 0.5 A
- RoHS (2011/65/EU) compliant

| Model | CT2848-6 | CT2848-8 | CT2848-12 |
|----------------------------|---|---|---|
| SMD MicroTest Clips | 6 | 8 | 12 |
| Interconnecting MicroLeads | 6 | 8 | 12 |
| Holding Rods | 3 | 4 | 6 |
| Clips and Leads Colors | 1 Black, 1 Red, 1 Yellow, 1 Green, 1 Blue & 1 White | 2 Black, 2 Red, 1 Yellow, 1 Green, 1 Blue & 1 White | 2 Black, 2 Red, 2 Yellow, 2 Green, 2 Blue & 2 White |



CT2848-12



SMD Test Clip

- Pincer style SMD clip or IC test measurements
- Interconnection pins in both finger grips: .024" (0.6 mm)
- Use with .031" (0.8 mm) MicroLead jack
- Nickel plated
- RoHS (2011/65/EU) compliant

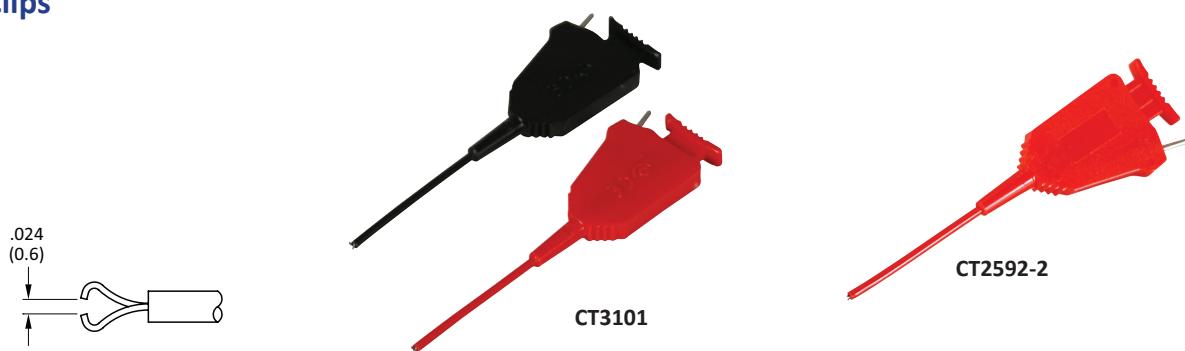


CT3659-8

| Model | Voltage | Current | Color | Qty / Pkg |
|----------|--------------------|---------|-------|-----------|
| CT3659-8 | 30 VAC / 60 VDC | 1 A | Grey | 10 |

Clips

SMD Clips



SMD MiniFlex Clips

Ideal for surface mount device fine testing. The clip's narrow width, only .12" (3 mm), supports tight side-by-side stacking.

- IEC 61010-031 rated
- Access ICs down to 0.20 mm wide on a 0.8 mm pitch
- Insulated shaft can be flexed up to 36° in any direction
- Steel pincers open up to .024" (0.6 mm) and can be rotated by hand to desired attachment position
- Interconnection pin .031" (0.8 mm)
- Use with MicroLead interconnection wires
- RoHS (2011/65/EU) compliant

| Model | CT3101 | CT2592-# |
|-------------|-----------------|------------------|
| Type | Set | Individual |
| IEC Rating | 30 VAC / 60 VDC | |
| Current Max | 1 A | |
| Color | Black & Red | See How to Order |
| Qty / Pkg | 1 Pair | 10 |

| How to Order | Color (-#) |
|--------------|----------------------|
| CT2592-# | -0 Black -2 Red |

MiniFlex Clip Leads

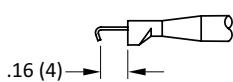
- IEC 61010-031 rated
- Highly flexible silicone jacketed wire
- Wire gauge: 21 AWG; OD: 2.1 mm (.083")
- Conductor area: 0.40 mm²
- Stranding: 100 x 0.07 mm
- RoHS (2011/65/EU) compliant



| Model | CT3096 | CT2551-L-# |
|-------------|-------------------------|------------------|
| Type | Set | Individual |
| One End | MiniFlex Clip | |
| Other End | 4 mm Sheath Banana Jack | |
| IEC Rating | 30 VAC / 60 VDC | |
| Current Max | 1 A | |
| Length | 10 cm | See How to Order |
| Color | Black & Red | See How to Order |
| Qty / Pkg | 1 Pair | 5 |

| How to Order | | |
|--------------|----------------|--------|
| CT2551-L-# | Length cm (-L) | |
| | -10 | -50 |
| | Color (-#) | |
| | -0 Black | -2 Red |

SMD Clips & SMD Tweezers



MiniPro Miniature Test Clips

Do-it-yourself miniature hook clip for general purpose electronic testing. With a compact size and easy to solder assembly, the clips are ideally suited for today's tight measurement needs. The clips feature smooth, soft touch actuation and the hook contacts are made of high quality gold plated BeCu. Clips are available in 10 colors for easy circuit identification. The MiniPro clips also feature a snap-lock to securely fix the cap to the body.

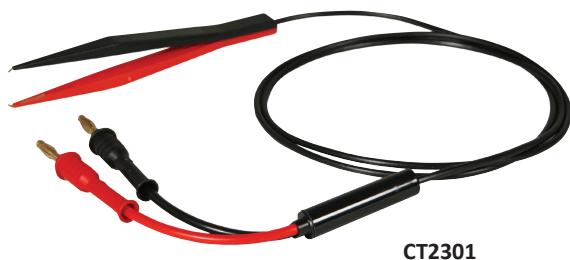
- IEC 61010-031 rated
- Hook opens to .079" (2 mm)
- Contact hook: BeCu, gold plated
- RoHS (2011/65/EU) compliant

| Model | CT3217 | CT3180-# | CT3218 |
|-------------|-----------------|------------------|-------------------|
| Type | Set | Individual | Set |
| IEC Rating | 30 VAC / 60 VDC | | |
| Current Max | 6 A | | |
| Color | Black & Red | See How to Order | 1 of each Color |
| Qty / Pkg | 1 Pair | 10 | 10-Piece Clip Set |

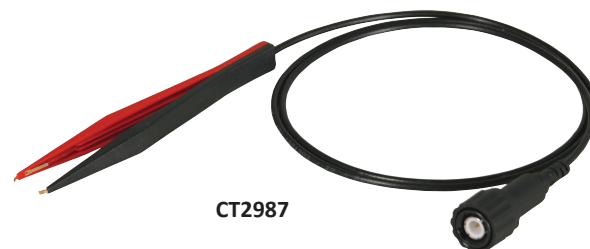


CT3217

| How to Order | Color (-#) | | | | | | | | | |
|--------------|------------|----------|----------|--------|-----------|-----------|----------|---------|-----------|---------|
| | CT3180-# | -0 Black | -1 Brown | -2 Red | -3 Orange | -4 Yellow | -5 Green | -6 Blue | -7 Violet | -8 Grey |



CT2301



CT2987

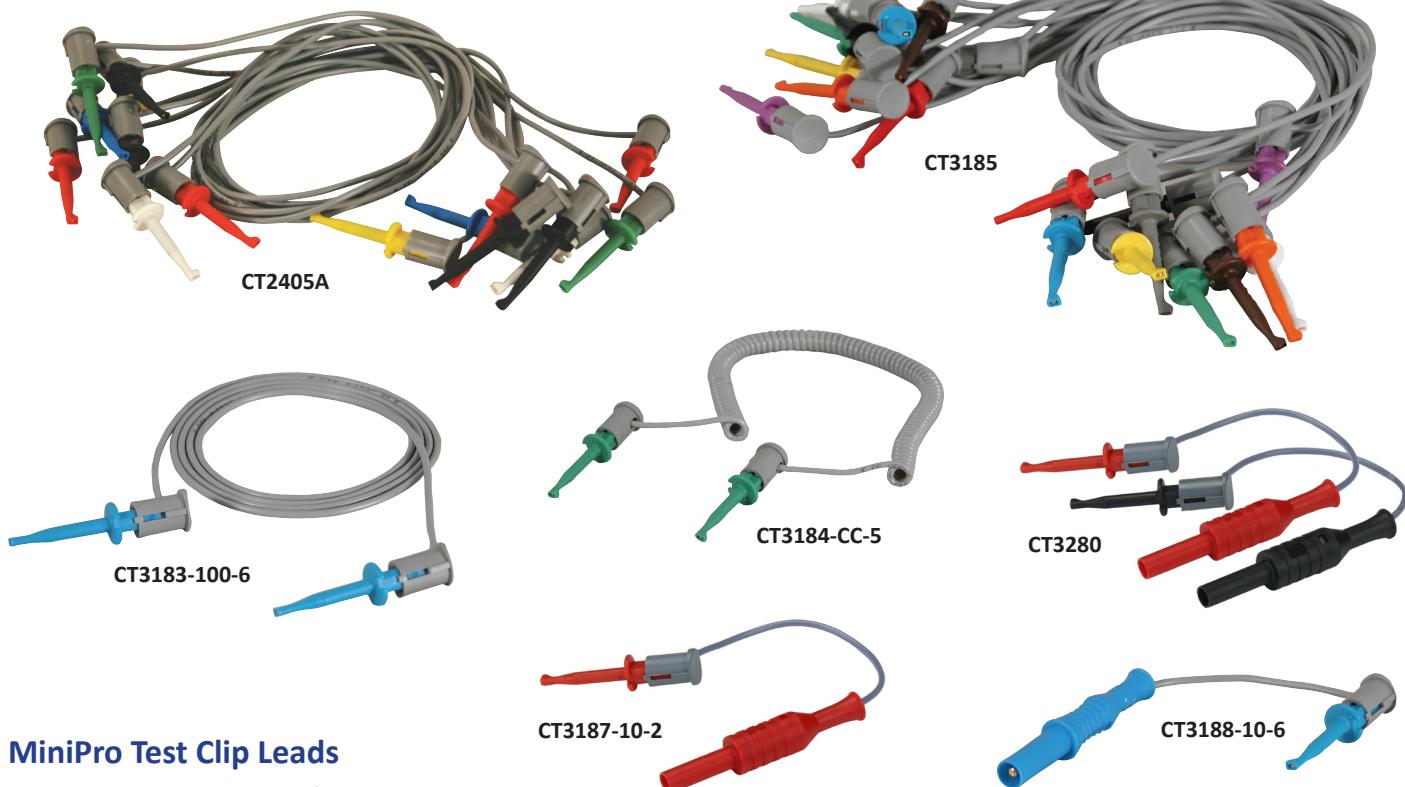
SMD Tweezers with Connector

- RoHS (2011/65/EU) compliant

| Model | CT2301 | CT2987 |
|-----------------|--------------------------------------|--------------------|
| Connectors | (Two) 4 mm Banana Plugs, Gold Plated | BNC male Insulated |
| Voltage Max | 400 Vrms | |
| Current Max | 2 A | |
| Cable Type | RG-174/U | |
| Jacket Material | PVC | |
| Length | 100 cm | |

Clips

SMD Clips



MiniPro Test Clip Leads

- IEC 61010-031 rated: 30 VAC / 60 VDC
- Durable and flexible PVC jacketed wire
- Wire gauge: 21 AWG; OD: 2 mm (.079")
- Conductor area: 0.40 mm²
- Stranding: 104 x 0.07 mm
- RoHS (2011/65/EU) compliant

| Model | CT2405A | CT3185 | CT3183-100-# | CT3184-CC-# | CT3280 | CT3187-10-# | CT3188-10-# | | |
|-------------|--|---|------------------|--------------------------|-------------------------|------------------|-------------------------|--|--|
| Type | Kit | | Individual | | Set | Individual | | | |
| One End | MiniPro Clip | | | | | | | | |
| Other End | MiniPro Clip | | | MiniPro Clip Coiled Wire | 4 mm Sheath Banana Jack | | 4 mm Sheath Banana Plug | | |
| IEC Rating | 30 VAC / 60 VDC | | | | | | | | |
| Current Max | 6 A | | | | | | | | |
| Length | 100 cm | 50 cm | 100 cm | 70 cm | 10 cm | | | | |
| Color | 2 Black, 2 Red, 1 Yellow, 1 Green, 1 Blue, 1 White | 1 Black, 1 Brown, 1 Red, 1 Orange, 1 Yellow, 1 Green, 1 Blue, 1 Violet, 1 Grey, 1 White | See How to Order | | Black & Red | See How to Order | | | |
| Qty / Pkg | 1 | | 10 | | 1 Pair | 10 | | | |

| How to Order | Color (-#) | |
|--------------|------------|--------|
| CT3183-100-# | -0 Black | -2 Red |
| CT3184-CC-# | -0 Black | -2 Red |
| CT3187-10-# | -0 Black | -2 Red |
| CT3188-10-# | -0 Black | -2 Red |



Coaxial

A complete offering of adapters, attenuators and terminators are available in general purpose grade or in instrument grade. They feature a brass, nickel plated body and a BeCu gold plated contact, and are also available in kits. Coax cables & breakouts feature high quality connectors with gold plated center contacts, and silicone leads for flexibility at low temperature.

| | |
|-----------------------|-------|
| Adapters | 48-53 |
| Kits..... | 53 |
| Attenuators..... | 54-55 |
| Terminators | 55 |
| Cable Assemblies..... | 56 |
| Cable Breakouts..... | 57 |

Coaxial

Adapters, Between Series



CT2763



CT2771



CT2762

BNC to N, General Purpose Grade

- RoHS (2011/65/EU) compliant

| Model | CT2763 | CT2762 | CT2771 |
|----------------------------|-------------------------|----------------------|------------------------|
| Connector Grade | General Purpose | | |
| Type/Gender to Type/Gender | BNC male to N female | BNC female to N male | BNC female to N female |
| Impedance | 50 Ω | | |
| Frequency Range | DC to 4 GHz | | |
| VSWR Max | 1.30:1 DC to 4 GHz | | |
| Body | Brass, Nickel Plt. | | |
| Contact | Brass & BeCu, Gold Plt. | | |
| Dielectric | PTFE | | |
| Qty / Pkg | 5 | | |



CT3348



CT3346

BNC to N, Instrument Grade

- RoHS (2011/65/EU) compliant

| Model | CT3348 | CT3346 |
|----------------------------|---|---|
| Connector Grade | Instrument | |
| Type/Gender to Type/Gender | BNC female to N female | BNC female to N male |
| Impedance | 50 Ω | |
| Frequency Range | DC to 10 GHz | |
| VSWR Max | 1.04:1 DC to 1 GHz 1.07:1 1 to 2 GHz 1.29:1 2 to 10 GHz | 1.21:1 DC to 1 GHz 1.22:1 1 to 4 GHz 1.29:1 4 to 10 GHz |
| Insertion Loss | 0.1 dB | |
| Body | Brass, Nickel Plt. | |
| Contact | Brass & BeCu, Gold Plt. | |
| Dielectric | PTFE | |
| Qty / Pkg | 1 | |



CT3328

CT3387

BNC to SMA, General Purpose Grade

- RoHS (2011/65/EU) compliant

| Model | CT3328 | CT3387 |
|----------------------------|-------------------------|------------------------|
| Connector Grade | General Purpose | |
| Type/Gender to Type/Gender | BNC male to SMA female | BNC female to SMA male |
| Impedance | 50 Ω | |
| Frequency Range | DC to 4 GHz | |
| VSWR Max | 1.30:1 DC to 4 GHz | |
| Body | Brass, Nickel Plt. | |
| Contact | Brass & BeCu, Gold Plt. | |
| Dielectric | PTFE | |
| Qty / Pkg | 5 | |

Adapters, Between Series

| Model | CT3391 | CT3390 | CT3389 |
|----------------------------|-------------------------|----------------------|------------------------|
| Connector Grade | General Purpose | | |
| Type/Gender to Type/Gender | N male to SMA female | N female to SMA male | N female to SMA female |
| Impedance | 50 Ω | | |
| Frequency Range | DC to 11 GHz | | |
| VSWR Max | 1.4:1 DC to 11 GHz | | |
| Body | Brass, Nickel Plt. | | |
| Contact | Brass & BeCu, Gold Plt. | | |
| Dielectric | PTFE | | |
| Qty / Pkg | 1 | | |



CT3391



CT3389



CT3390

N to SMA, General Purpose

- RoHS (2011/65/EU) compliant



CT3340



CT3320



CT3322

| Model | CT3340 | CT3320 | CT3321 | CT3322 |
|----------------------------|--|---|---------------------------|---|
| Connector Grade | Instrument | | | |
| Type/Gender to Type/Gender | N male to SMA male | N male to SMA female | N female to SMA male | N female to SMA female |
| Impedance | 50 Ω | | | |
| Frequency Range | DC to 12 GHz | | DC to 11 GHz | DC to 12 GHz |
| VSWR Max | 1.10:1 DC to 6 GHz 1.20:1 6 to 12 GHz | 1.02:1 DC to 2 GHz 1.04:1 1 to 5 GHz 1.12:1 5 to 12 GHz | 1.05 + 0.005 x f (GHz) | 1.06:1 DC to 2 GHz 1.21:1 1 to 4 GHz 1.22:1 4 to 12 GHz |
| Insertion Loss | 0.03 x sqr. f(GHz) dB | 0.05 dB DC to 12 GHz | 0.04 x sqr. f(GHz) dB | 0.05 dB DC to 12 GHz |
| Body | Brass, Nickel Plt. | | | |
| Contact | Brass & BeCu, Gold Plt. | | | |
| Dielectric | PTFE | | | |
| Qty / Pkg | 1 | | | |

N to SMA,
Instrument Grade

- RoHS (2011/65/EU) compliant



CT2940



CT2939

BNC to 4mm Banana Plugs

Adapts a BNC cable, component or equipment to double banana plugs. Fits standard or sheath pair 4 mm banana jacks. Used for interconnection to power supplies, function generators and other test instruments.

- RoHS (2011/65/EU) compliant

| Model | CT2940 | CT2939 |
|----------------------------|--------------------------------------|--|
| Connector Grade | General Purpose | |
| Type/Gender to Type/Gender | BNC male to Double 4 mm Banana Plugs | BNC female to Double 4 mm Banana Plugs |
| Voltage Max | 500 Vrms | |
| Current Max | 3 A | |
| Impedance | 50 Ω | |
| Quantity / Pkg | 5 | |

Coaxial

Adapters, Between Series



CT2410



CT3161-0



CT2941

| Model | CT2410 | CT3161-# | CT2941 |
|----------------------------|---------------------------------------|---------------------------------------|---|
| Connector Grade | General Purpose | | |
| Type/Gender to Type/Gender | BNC male to Double 4 mm Binding Posts | BNC male to Single 4 mm Binding Posts | BNC female to Double 4 mm Binding Posts |
| Voltage Max | 500 Vrms | | |
| Current Max | 3 A | | |
| Impedance | 50 Ω | | |
| Color | n/a | See How to Order | n/a |
| Quantity / Pkg | 10 | 5 | |

| How to Order | Color (-#) |
|--------------|--------------------|
| CT3161-# | -0 Black -2 Red |



CT3888



CT3889

New

Insulated BNC to 4mm

Banana Plugs

Adapts male BNC cable, component or equipment to double banana plugs. Fits standard or sheath pair 4 mm banana jacks. Used for interconnection to power supplies, function generators and other test instruments.

- 0.75" (19 mm) plug spacing
- IEC 61010-031 rated (CT3889)
- RoHS (2011/65/EU) compliant

| Model | CT3888 | CT3889 |
|----------------------------|--|-------------------------------|
| Connector Grade | General Purpose | |
| Type/Gender to Type/Gender | Insulated BNC female to Double 4 mm Banana Plugs | |
| IEC Rating | <30 VAC / <60 VDC | 1000 V CAT II / 600 V CAT III |
| Current Max | 3 A | |
| Impedance | 50 Ω | |
| Quantity / Pkg | 5 | |



CT2412



CT2985

Insulated BNC to 4mm Safety Banana Jacks

- 0.75" (19 mm) jack spacing
- IEC 61010-031 rated
- RoHS (2011/65/EU) compliant

| Model | CT2412 | CT2985 |
|----------------------------|---|---|
| Connector Grade | General Purpose | |
| Type/Gender to Type/Gender | Insulated BNC male to Double 4 mm Safety Banana Jacks | Insulated BNC female to Double 4 mm Safety Banana Jacks |
| IEC Rating | 500 V CAT 0 | |
| Current Max | 3 A | |
| Impedance | 50 Ω | |
| Qty / Pkg | 10 | |

Adapters, In-Series



CT2765



CT2766



CT3313



CT3312



CT2411

BNC, General Purpose Grade

- RoHS (2011/65/EU) compliant

| Model | CT2765 | CT2766 | CT3313 | CT3312 | CT2411 | | |
|------------------|--------------------|------------------|-------------------------|-------------------------------|-----------------------------|--|--|
| Type | Straight | | Right Angle | | Tee | | |
| Connector Grade | General Purpose | | | | | | |
| Gender to Gender | female to female | male to male | male to female | female to female to female | female to male to female | | |
| Impedance | 50 Ω | | | | | | |
| Frequency Range | DC to 4 GHz | | DC to 4 GHz (various) | | DC to 4 GHz | | |
| VSWR Max | 1.30:1 DC to 4 GHz | | | n/a | | | |
| Insertion Loss | 0.2 dB | | | | | | |
| Body | Brass, Nickel Plt. | | | | | | |
| Contact | BeCu, Gold Plt. | Brass, Gold Plt. | Brass & BeCu, Gold Plt. | | Brass, Gold Plt. | | |
| Dielectric | PTFE | | | | | | |
| Qty / Pkg | 5 | | 1 | | 10 | | |

| Model | CT3341 |
|------------------|----------------------------------|
| Type | Tee |
| Connector Grade | Instrument |
| Gender to Gender | female to male to female |
| Impedance | 50 Ω |
| Frequency Range | DC to 6 GHz |
| VSWR Max | n/a |
| Insertion Loss | n/a |
| Body | Brass, White Bronze, Silver Plt. |
| Contact | Brass and BeCu, Gold Plt. |
| Dielectric | PTFE |
| Qty / Pkg | 1 |



CT3341

BNC, Instrument Grade

- RoHS (2011/65/EU) compliant

Coaxial

Adapters, In-Series



CT2759



CT2758



CT3388



CT2761



CT2760

N, General Purpose Grade

- RoHS (2011/65/EU) compliant

| Model | CT2759 | CT2758 | CT3388 | CT2761 | CT2760 | | |
|------------------|--------------------|------------------|-----------------------|-------------------------------|-----------------------------|--|--|
| Type | Straight | | Right Angle | Tee | | | |
| Connector Grade | General Purpose | | | | | | |
| Gender to Gender | male to male | female to female | male to female | female to female to female | female to male to female | | |
| Impedance | 50 Ω | | | | | | |
| Frequency Range | DC to 8 GHz | DC to 11 GHz | DC to 8 GHz (various) | DC to 8 GHz | | | |
| VSWR Max | 1.30:1 DC to 8 GHz | | 1.35:1 DC to 8 GHz | n/a | | | |
| Insertion Loss | -- | -- | -- | n/a | | | |
| Body | Brass, Nickel Plt. | | | | | | |
| Contact | Brass, Gold Plt. | | | | | | |
| Dielectric | PTFE | | | | | | |
| Qty / Pkg | 5 | | 1 | 5 | | | |

CT3350



CT3351



N, Instrument Grade

- RoHS (2011/65/EU) compliant

| Model | CT3351 | CT3350 |
|------------------|--|--|
| Type | Straight | |
| Connector Grade | Instrument | |
| Gender to Gender | male to male | female to female |
| Impedance | 50 Ω | |
| Frequency Range | DC to 11 GHz | |
| VSWR Max | 1.04:1 DC to 2 GHz 1.07:1 2 to 4 GHz 1.12:1 4 to 9 GHz | 1.05:1 DC to 2 GHz 1.12:1 2 to 4 GHz 1.17:1 4 to 9 GHz |
| Insertion Loss | <0.05 dB DC to 9 GHz | |
| Body | Brass, White Bronze, Silver Plt. | |
| Contact | Brass and BeCu, Gold Plt. | |
| Dielectric | PTFE | |
| Qty / Pkg | 1 | |

Adapters & Kits

| Model | CT3673 | CT3674 |
|------------------|-----------------------------|--------------------------|
| Type | Straight | Tee |
| Connector Grade | General Purpose | |
| Gender to Gender | male to female | female to male to female |
| Impedance | 50 Ω | |
| Frequency Range | 12 GHz | 12.5 GHz |
| VSWR Max | 1.14:1 | n/a |
| Insertion Loss | 0.25 dB | n/a |
| Body | Stainless Steel, Passivated | |
| Contact | BeCu, Gold Plt. | |
| Dielectric | PTFE | |
| Qty / Pkg | 5 | |



CT3673



CT3674

SMA, General Purpose Grade Adapters

- RoHS (2011/65/EU) compliant

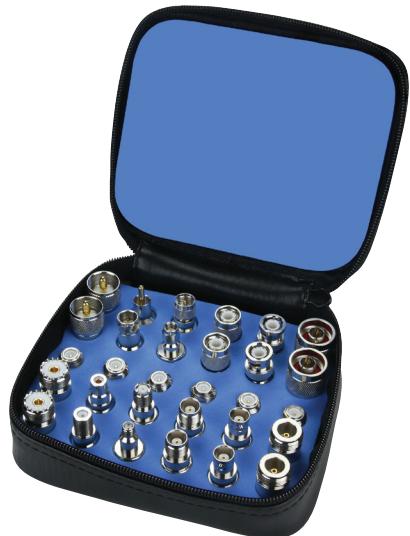
| Rating | |
|---|----------------------|
| Connector Grade | General Purpose |
| Impedance | 50 Ω & Various |
| Kit Contains | |
| (6) Central Universal connectors plus the following Adapters: | |
| Type | Gender & (Quantity) |
| BNC | male (2), female (2) |
| F | male (1), female (1) |
| N | male (2), female (2) |
| RCA | male (1), female (1) |
| SMA | male (1), female (1) |
| TNC | male (2), female (2) |
| UHF | male (2), female (2) |
| Mini-UHF | male (1), female (1) |

Universal Coaxial Adapter Kit

Model CT2701A

This adapter kit allows you to create any combination of in-series and between-series coax adapters for BNC, N, F, TNC, RCA, UHF, Mini-UHF and SMA connectors. This is done by screwing together two separate adapters to a universal center adapter. All pieces are machined brass with Teflon dielectrics and gold plated center contacts. Whether field service or bench, this adapter kit provides an easy solution to coaxial connection requirements.

- 30-piece kit
- RoHS (2011/65/EU) compliant
- Comes in a protective foam lined case



| Rating | |
|--|-----------------|
| Connector Grade | General Purpose |
| Impedance | 50 Ω |
| Frequency Range | DC to 8 GHz |
| Kit Contains | |
| (1) BNC female to male to female Tee Adapter (1) N female to female Adapter (1) N male to male Adapter (1) N female to male to female Tee Adapter (1) N female to female to female Tee Adapter (1) BNC female to N male Adapter (1) BNC male to N female Adapter (1) BNC female to female Adapter (1) BNC male to male Adapter (1) BNC female to N female Adapter (1) BNC female to female to female Tee Adapter (1) N male to female Right-Angle Adapter | |

BNC and N Coaxial Adapter Kit

Model CT2702A

- 12-piece kit
- RoHS (2011/65/EU) compliant
- Comes in a protective foam lined case



Coaxial

Attenuators



BNC, 50 Ω, Male to Female Attenuators

Instrument grade BNC male to female 50 Ω fixed coaxial attenuators are linear, passive transmission line components designed to reduce the input power in a matched system. They are intended for laboratory, production, testing and system use. Typical applications include VSWR reduction at the insertion point, range extension of power meters, RF path loss simulation, and isolation or power level reduction of signal sources.

- Available in 7 popular attenuation ranges
- High quality construction
- Excellent VSWR
- Usable to 4 GHz
- Contact BeCu, gold plated
- RoHS (2011/65/EU) compliant
- Available in 6-piece kit CT3382A shown on page 55

Attenuation up to 10 dB

| Model | CT3369A-03 | CT3369A-06 | CT3369A-08 | CT3369A-10 |
|------------------------|--------------------|------------|-------------|--------------|
| Connector Grade | Instrument | | | |
| Gender | male to female | | | |
| Attenuation (dB) / (V) | 3 dB / 1.4x | 6 dB / 2x | 8 dB / 2.5x | 10 dB / 3.2x |
| Impedance | 50 Ω | | | |
| Frequency Range | DC to 4 GHz | | | |
| VSWR | 1.25:1 DC to 4 GHz | | | |
| Avg. Power | 2 W | | | |
| Peak Power | 250 W | | | |
| Accuracy | +0.5 dB Max | | | |
| Body | Brass, Nickel Plt. | | | |
| Contacts | BeCu, Gold Plt. | | | |
| Quantity / Pkg | 1 | | | |

Attenuation 14 dB and above

| Model | CT3369A-14 | CT3369A-20 | CT3369A-30 | | |
|------------------------|--------------------|--------------|--------------|--|--|
| Connector Grade | Instrument | | | | |
| Gender | male to female | | | | |
| Attenuation (dB) / (V) | 14 dB / 5x | 20 dB / 10x | 30 dB / 100x | | |
| Impedance | 50 Ω | | | | |
| Frequency Range | DC to 4 GHz | | | | |
| VSWR | 1.25:1 DC to 4 GHz | | | | |
| Avg. Power | 2 W | | | | |
| Peak Power | 250 W | | | | |
| Accuracy | +0.5 dB Max | +0.75 dB Max | | | |
| Body | Brass, Nickel Plt. | | | | |
| Contacts | BeCu, Gold Plt. | | | | |
| Quantity / Pkg | 1 | | | | |

Attenuators & Terminators

Attenuator BNC, 50 Ω, 6-Piece Kit

Kit contains six (6) precision CT3369A BNC, 50 Ω, male to female coaxial attenuators in a convenient kit. Comes in a foam-lined wooden case.

- RoHS (2011/65/EU) compliant



CT3382A

Attenuator N, 50 Ω, Male to Female

Instrument grade male to female 50 Ω fixed coaxial attenuator.

- High quality construction
- Excellent VSWR
- Usable to 12.4 GHz
- RoHS (2011/65/EU) compliant



CT3353-10

| Model | CT3353-10 |
|------------------------|---|
| Connector Grade | Instrument |
| Gender | male to female |
| Attenuation (dB) / (V) | 10 dB / 3.2x |
| Impedance | 50 Ω |
| Frequency Range | DC to 12.4 GHz |
| VSWR | 1.15:1 DC to 4 GHz 1.25:1 4 to 12.4 GHz |
| Avg Power | 2 W |
| Peak Power | 500 W |
| Accuracy | +0.75 dB Max |
| Body | Stainless Steel, Passivated |
| Contacts | BeCu, Gold Plt. |
| Quantity / Pkg | 1 |

BNC Coaxial Terminators

BNC feed-thru terminators match higher impedance devices to the input impedance of the test equipment. End terminators match the characteristic impedance of the transmission line.

- High quality construction
- Excellent VSWR
- 50 Ω feed-thru up to 2 GHz
- Contact BeCu, gold plated
- RoHS (2011/65/EU) compliant

New

CT2944-50
CT2944-75
CT2944-93

CT3334-50

| Model | CT2944-50 | CT2944-75 | CT2944-93 | CT3334-50 |
|-----------------|---|---|----------------------|---------------|
| Style | | Feed-Thru | | Term |
| Connector Grade | | General Purpose | | |
| Gender | | male to female | | male |
| Impedance | 50 Ω | 75 Ω | 93 Ω | 50 Ω |
| Frequency Range | DC to 2 GHz | DC to 1 GHz | | DC to 500 MHz |
| VSWR | 1.10:1 DC to 500 MHz 1.20:1 500 MHz to 2 GHz | 1.10:1 DC to 500 MHz 1.20:1 500 MHz to 1 GHz | | -- |
| Power | 2 W | 1 W | | 1/2 W |
| Input Voltage | ≤10 VDC / 20 VAC p-p | ≤8 VDC / 16 VAC p-p | ≤10 VDC / 20 VAC p-p | -- |
| Accuracy | | 0.5% | | -- |
| Body | | Brass, Nickel Plt. | | |
| Contacts | | BeCu, Gold Plt. | | |
| Qty / Pkg | | 1 | | |

Coaxial

Cable Assemblies



Coxial Cable Assemblies

BNC, N, SMA

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

| Model | CT2942-L | CT2417-L# | CT3331-100 | CT3333-60 | CT3396-100 | CT3330-60 | |
|-----------------|----------------------|--|-------------------------|-----------------------|----------------------|----------------------|-------|
| Connectors Type | BNC male to BNC male | Insulated BNC male to Insulated BNC male | N male to N male | SMA male to SMA male | SMA male to BNC male | | |
| Connector Grade | General Purpose | | | | | | |
| IEC Rating | n/a | 500 V CAT 0 | n/a | | | | |
| Impedance | 50 Ω | | | | | | |
| Frequency Range | DC to 1 GHz | DC to 2 GHz | DC to 12.4 GHz | DC to 18 GHz | DC to 6 GHz | DC to 4 GHz | |
| VSWR Max | 1.2:1 DC to 1 GHz | -- | 1.4:1 DC to 12.4 GHz | 1.3:1 DC to 18 GHz | 1.3:1 DC to 6 GHz | 1.3:1 DC to 4 GHz | |
| Insertion Loss | -- | -- | 0.7 dB/ft | | | 0.9 dB/ft | |
| Cable Type | RG-58C/U | Custom Coax | SRC-402SF | | | SRC-316 | |
| Jacket Material | PVC Highly Flexible | | FEP, White | | | FEP, White | |
| Insulated BNC | No | Yes | No | | | | |
| Qty / Pkg | 5 | 10 | 1 | | | | |
| Length | See How to Order | | | 100 cm | 60 cm | 100 cm | 60 cm |
| Color | Black | See How to Order | Not Applicable | | | | |

| Model | How to Order | | | | | | | |
|-----------|----------------|-----|----|------|------|------|------|------|
| | Length cm (-L) | | | | | | | |
| CT2417-L# | -- | -- | -- | -100 | -- | -- | -200 | -- |
| | Color (-#) | | | | | | | |
| CT2942-L | -0 Black | -- | -- | -- | -- | -- | -- | -- |
| | Length cm (-L) | | | | | | | |
| | -25 | -50 | -- | -100 | -120 | -150 | -200 | -250 |

Cable Breakouts

Coaxial Cable Breakout Assemblies

BNC Male

- PVC molded boot relief
- RoHS (2011/65/EU) compliant

| Model | CT3158-100 | CT3230-100 |
|-----------------|-----------------------------|-----------------------------------|
| Connectors | BNC male to Alligator Clips | BNC male to MiniPRO IC Test Clips |
| Voltage Max | 500 Vrms | |
| Current Max | 3 A | |
| Cable Type | RG-58C/U | |
| Jacket Material | PVC | |
| Impedance | 50 Ω | |
| Length | 100 cm | |
| Color | Black | |
| Qty / Pkg | 5 | |



Breakouts, Insulated BNC Female

- IEC 61010-031 rated
- Flexible silicone breakout leads
- Breakout length: 25 cm
- RoHS (2011/65/EU) compliant

| Model | CT3264 | CT3269 | CT3270 | | |
|-----------------------|-----------------------------------|-------------------------------------|---|--|--|
| Connectors | BNC female to Blunt Wire Cut Ends | BNC female to MiniPRO IC Test Clips | BNC female to Miniature Alligator Clips | | |
| IEC Rating | 33 VAC / 70 VDC | | | | |
| Current Max | 6 A | 2 A | | | |
| Impedance | 50 Ω | | | | |
| Conductor Area | 0.40 mm ² | | | | |
| Wire Gauge | 21 AWG | | | | |
| Stranding (# x Diam.) | 100 x 0.07 mm | | | | |
| Qty / Pkg | 2 | | | | |

Banana Jacks



Banana Jacks

Cal Test Electronics offers a full line of 4 mm jacks to meet your interconnection needs. The family includes standard panel jacks, binding posts, and specialty jacks that when attached turns a standard jack into a safety version.

All are made of the highest quality material and exacting standards, just what you need to build your next product or test fixture.

| | |
|--------------------------------|------------|
| In-Line DIY Assembly | 59 |
| Panel Mount & Accessories..... | 60, 61, 63 |
| PCB Mount | 62 |
| Binding Posts | 63 |
| Adapters | 62 |

Banana Jacks

In-Line DIY Assembly

| Model | CT2213-# | CT2215-# |
|-------------------|----------------------------|----------------------------|
| Type | Individual | |
| Wire Attachment | Solder | Set Screw |
| IEC Rating | 30 VAC / 60 VDC | |
| Voltage, Max | 1,200 VAC / VDC | |
| Current, Max | 36 A | |
| Body Insulation | Polyamide (Nylon) | |
| Contacts | Brass, Nickel Plt. | |
| Cable Diam. up to | 3.9 mm (.154") Max | |
| For Wires up to | 2.5 mm ² 13 AWG | |
| Assembly | n/a | Requires Small Screwdriver |
| Color | See How to Order | |
| Qty / Pkg | 50 | |



In-Line 4mm Banana Jacks, Insulated, DIY Assembly

For Solder Assembly Model CT2213: Solder wire attachment, then thread jack into the insulator.

For Solderless Assembly Model CT2215: Screw down clamp for solderless wire attachment, then thread jack into the insulator.

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

| How to Order | Color (-#) | | | | | |
|--------------|------------|--------|-----------|----------|---------|----------|
| CT2213-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2215-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |



| Model | CT3207 | CT3207W | CT3134-# | CT3134-S-# |
|-------------------|------------------------------|------------------------------|--------------------------------|------------|
| Type | Set | | | Individual |
| Wire Attachment | Set Screw | | Solder | |
| *IEC Rating | 1,000 V CAT III / CAT IV | | 1,000 V CAT III / 600 V CAT IV | |
| Current, Max | 36 A | | | |
| Body Insulation | Polyamide (Nylon) | | | |
| Contacts | Brass, Nickel Plt. | | | |
| Cable Diam. up to | 3.9 mm (.154") Max | | | |
| For Wires up to | 2.5 mm ² 13 AWG | | | |
| Assembly | Requires 1.5 mm Allen Wrench | Includes 1.5 mm Allen Wrench | Requires 1.5 mm Allen Wrench | n/a |
| Color | Black & Red | | See How to Order | |
| Qty / Pkg | 1 Pair | | 10 | |



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

Fully Insulated. Do-it-yourself connection.

2-piece assembly.

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

| How to Order | Color (-#) | | | | | |
|--------------|------------|--------|-----------|----------|---------|----------|
| CT3134-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT3134-S-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |

Banana Jacks

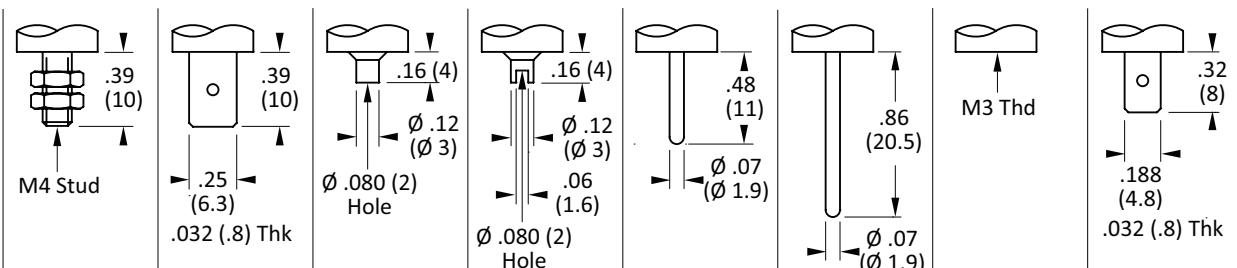
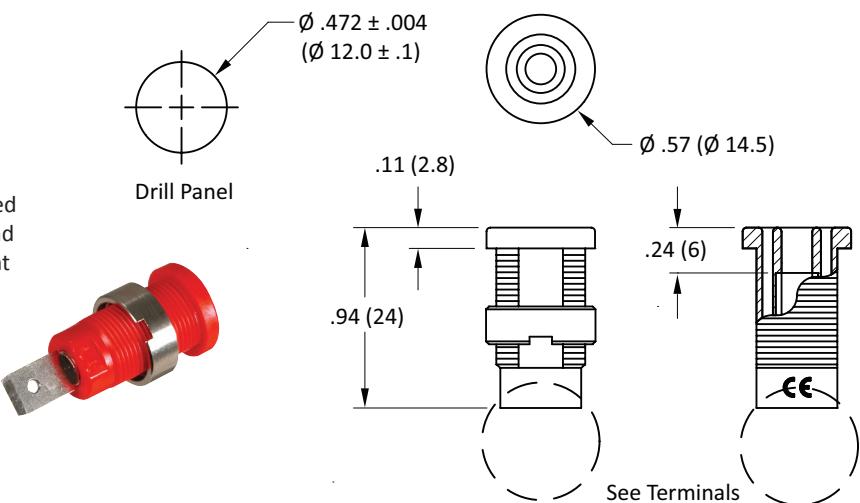
Panel Mount & Accessories

4mm Sheath Banana Jacks

Panel Mount w/Panel Nut

4 mm safety banana jack (socket) accepts sheath or shrouded banana plugs and meets IEC 61010-031 to 1,000 V CAT III and 600 V CAT IV. Round panel nut allows for compact placement and easy assembly.

- IEC 61010-031 rated
- Materials: body: polyamide (nylon); jack and nut: brass, nickel plt.
- Maximum panel thickness: .40" (10 mm)
- M12 x 0.75 mm thread
- Use assembly tool CT2246A
- RoHS (2011/65/EU) compliant



| Model | CT2236-# | CT2238-# | CT2240-# | CT2242-# | CT2904-# | CT2906-# | CT2908-# | CT2910-# | | |
|-------------|--------------------------------|-----------------------|--------------------------|--------------------------|--------------------------------|-------------------------------|------------------|------------------------|--|--|
| IEC Rating | 1,000 V CAT III / 600 V CAT IV | | | | | | | | | |
| Current Max | 36 A | | 25 A | | 36 A | | | | | |
| Termination | M4 Threaded Stud | .25" (6.4 mm) Faston® | .080" (2 mm) solder hole | .080" (2 mm) solder slot | 1.9 mm diam. x 12 mm short pin | 1.9 mm diam. x 21 mm long pin | M3 threaded hole | .188" (4.8 mm) Faston® | | |
| Color | See How to Order | | | | | | | | | |
| Qty / Pkg | 50 | | | | | | | | | |

How to Order

| Model-# | Color (-#) | | | | | | | | |
|---------|------------|----------|--------|-----------|----------|---------|-----------|---------|----------|
| | -0 Black | -1 Brown | -2 Red | -4 Yellow | -5 Green | -6 Blue | -7 Violet | -8 Grey | -9 White |

Panel Mount Banana Jack Accessories



Wrench Set

Model **CT2246A**
2-piece assembly wrench for panel mount 4 mm safety jacks.
RoHS (2011/65/EU) compliant



Replacement Nut

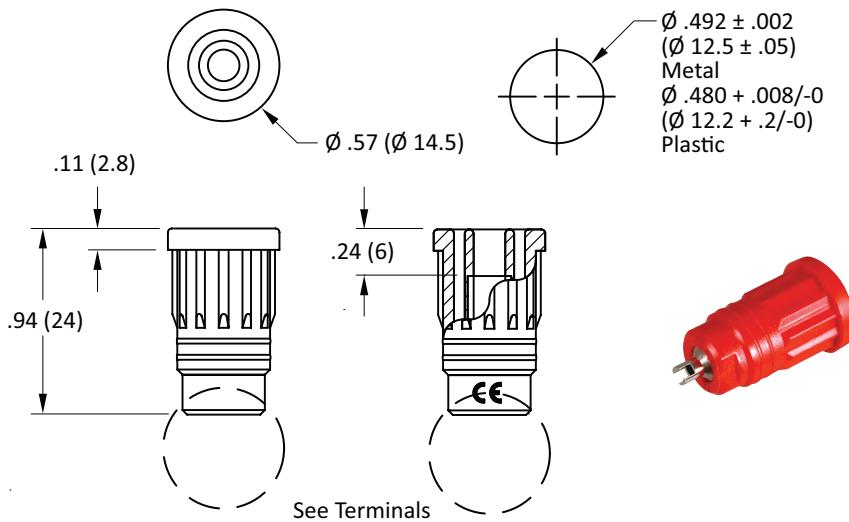
Model **CT2830**
Materials: brass, nickel plt.
Thread: M12 x 0.75 mm
RoHS (2011/65/EU) compliant
Sold in package of 100



Banana Jack Standoff

| Model | CT2667-# | Model | Color |
|---|----------|----------|--------|
| Standoff for raising banana jacks 11 mm above panel. Materials: polyamide (nylon). Max voltage rating for socket using standoff: 600 V CAT III. RoHS (2011/65/EU) compliant | CT2667-0 | CT2667-0 | Black |
| Sold in package of 50 | CT2667-2 | CT2667-2 | Red |
| | CT2667-4 | CT2667-4 | Yellow |
| | CT2667-5 | CT2667-5 | Green |
| | CT2667-8 | CT2667-8 | Grey |

Panel Mount

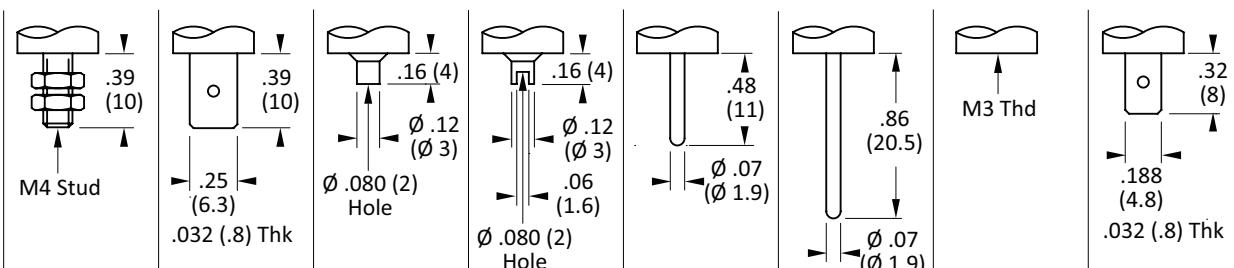


4mm Sheath Banana Jacks

Panel Mount, Press Fit

4 mm safety banana jack (socket) accepts sheath or shrouded banana plugs and meets IEC 61010-031 to 1,000 V CAT III and 600 V CAT IV. Fast push-in assembly in either metal or plastic panels.

- IEC 61010-031 rated
- Materials: body: polyamide (nylon); jack: brass, nickel plt.
- Minimum panel thickness: plastic .080" (2 mm); metal .060" (1.5 mm)
- RoHS (2011/65/EU) compliant



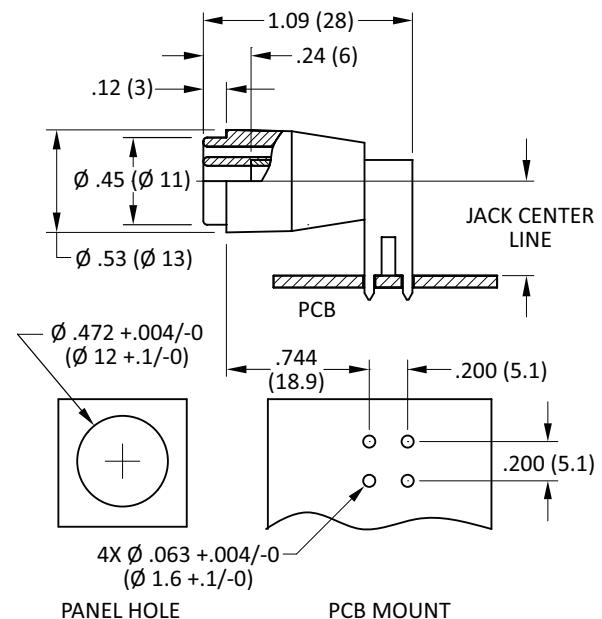
| Model | CT2243-# | CT2244-# | CT2245-# | CT2911-# | CT2912-# | CT2913-# | CT2914-# | CT2915-# |
|-------------|--------------------------------|--------------------------|--------------------------|-----------------------|--------------------------------|-------------------------------|------------------|------------------------|
| IEC Rating | 1,000 V CAT III / 600 V CAT IV | | | | | | | |
| Current Max | 36 A | | | | | | | |
| Termination | M4 Threaded Stud | .080" (2 mm) solder hole | .080" (2 mm) solder slot | .25" (6.3 mm) Faston® | 1.9 mm diam. x 12 mm short pin | 1.9 mm diam. x 21 mm long pin | M3 threaded hole | .188" (4.8 mm) Faston® |
| Color | See How to Order | | | | | | | |
| Qty / Pkg | 50 | | | | | | | |

How to Order

| Model-# | Color (-#) | | | | | | | | | |
|---------|------------|----------|--------|-----------|----------|---------|-----------|---------|----------|--|
| | -0 Black | -1 Brown | -2 Red | -4 Yellow | -5 Green | -6 Blue | -7 Violet | -8 Grey | -9 White | |

Banana Jacks

PCB Mount & Adapters



4mm Sheath Banana Jacks (Sockets), PCB Mount

- IEC 61010-031 rated: 1000 V CAT III
- Current Max: 25 A
- Materials: body: polyamide (nylon); jack: brass, nickel plt.
- Panel thickness: .118" (3 mm)
- 4 mm safety jack (socket) accepts sheath or shrouded banana plugs
- RoHS (2011/65/EU) compliant

| Model | CT3151-# | CT3151SP-# | CT3149-# | CT3150-# |
|-------------------|-----------------------------------|----------------------------------|--|---|
| Mounting into PCB | 4 Terminals into PCB Pad | | 1.9 mm Diam. x 12 mm Short Pin for insertion into a PCB | 1.9 mm Diam. x 21 mm Long Pin for insertion into a PCB |
| Jack Center Line | .492" (12.5 mm) above PCB Surface | .300" (7.6 mm) above PCB Surface | Not applicable | |
| UL Recognized | per PICQ2 and PICQ8 E315929 | | Not applicable | |
| Color | See How to Order | | | |
| Qty / Pkg | 100 | | 50 | |

How to Order

| Model-# | Color (-#) | | | | | | | | |
|---------|------------|----------|--------|-----------|----------|---------|-----------|---------|----------|
| | -0 Black | -1 Brown | -2 Red | -4 Yellow | -5 Green | -6 Blue | -7 Violet | -8 Grey | -9 White |

Banana Jack Adapters



Adapter turns a standard 4 mm banana jack into a safety jack. The jack will now accept a sheath 4 mm banana plug. Assemble with a 1.5 mm Allen wrench (CT2919) to provide a firm attachment. Materials: Body: polyamide (nylon); jack: brass, nickel plt.

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

| Model | CT2575-# | CT2247-# |
|-------------|------------------|---------------|
| IEC Rating | 400 V CAT 0 | 1,000 V CAT 0 |
| Current Max | 36 A | |
| Color | See How to Order | |
| Qty / Pkg | 10 | |

| How to Order | | |
|--------------|------------|--------|
| Model-# | Color (-#) | |
| | -0 Black | -2 Red |



Allen Wrench, 1.5mm

| Model | CT2919 |
|-------|--------|
|-------|--------|

Assembly wrench for safety adapters and DIY sheathed plugs and jacks. Materials: steel. RoHS (2011/65/EU) compliant. Sold in package of 5.

Banana Jacks

4mm Standard Banana Jacks (Sockets)

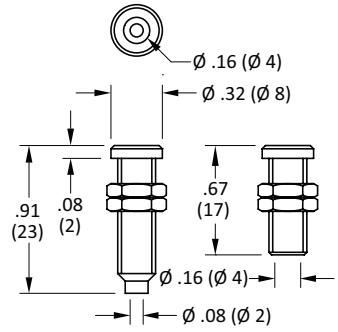
Un-Insulated, Panel Mount

- For direct mounting to a panel
- Great for grounding point
- Materials: jack and nut: brass, nickel plt.
- M6 x 0.75 mm thread
- RoHS (2011/65/EU) compliant

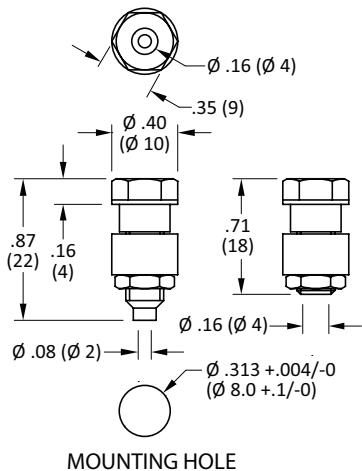
| Model | CT2220 | CT2224 |
|-------------|-------------|-----------|
| Current Max | 36 A | |
| Termination | Solder Hole | Thru Hole |
| Qty / Pkg | 50 | |



Panel Mount & Binding Posts



MOUNTING HOLE
Ø .234 +.004/-0
(Ø 6.0 +.1/-0)



MOUNTING HOLE
Ø .313 +.004/-0
(Ø 8.0 +.1/-0)



| How to Order | Color (-#) | | | | | |
|--------------|------------|--------|-----------|----------|---------|----------|
| CT2228-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2230-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |

4mm Standard Banana Jacks (Sockets)

Insulated, Panel Mount

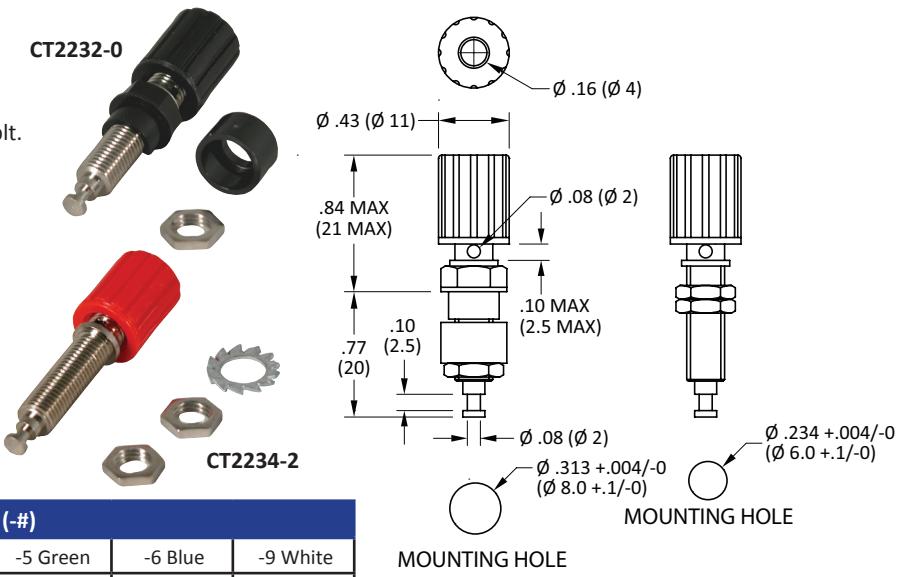
- IEC 61010-031 rated
- For direct mounting to a panel
- Materials: body: polyamide (nylon); jack: brass, nickel plt.
- Maximum panel thickness: .20" (5 mm)
- M6 x 0.75 mm thread
- RoHS (2011/65/EU) compliant

| Model | CT2228-# | CT2230-# |
|-------------|------------------|-----------|
| IEC Rating | 30 VAC / 60 VDC | |
| Voltage Max | 1,200 VAC / VDC | |
| Current Max | 36 A | |
| Termination | Solder Hole | Thru Hole |
| Color | See How to Order | |
| Qty / Pkg | 50 | |

Binding Posts, Panel Mount

- IEC 61010-031 rated
- 4 mm standard banana jack w/ 2 mm cross hole
- Material: body: polyamide (nylon); jack: brass, nickel plt.
- M6 x 0.75 mm thread
- RoHS (2011/65/EU) compliant

| Model | CT2232-# | CT2234-# |
|----------------|------------------|-------------|
| Type | Insulated | Uninsulated |
| IEC Rating | 30 VAC / 60 VDC | |
| Voltage Max | 1,200 VAC / VDC | |
| Current Max | 36 A | |
| Color | See How to Order | |
| Quantity / Pkg | 50 | |



Banana Plugs



Banana Plugs

The most extensive line of plugs and leads on the market today. This category includes standard banana plugs, both with in-line and stackable configurations with either solder or solderless connections. Also included are sheath, stackable, retractable and DIY plugs. All are made of the highest quality material to exacting standards.

| | |
|---------------------------|-------|
| Standard | 65 |
| Double | 66 |
| Sheath | 66-67 |
| Retractable Sleeve | 68 |
| Test Leads | 69-73 |
| Technical Reference | 88-89 |

Banana Plugs

Standard



CT2002-0



CT2011-2



CT3276-2



CT3249-6

| Model | CT2002-# | CT2011-# | CT3276-# | CT3249-# |
|-------------------------|---|----------------------------|------------|-----------------------|
| Wire Attachment | Solder | | Set Screw | *Spring-loaded Button |
| Type | Individual | | | |
| IEC Rating | 30 VAC / 60 VDC | | | |
| Voltage Max | 1,200 VAC / VDC | | | |
| Current Max | 36 A | | | 20 A |
| Body Insulation | Polyamide (Nylon) | | Santoprene | Polyamide (Nylon) |
| Plug & Contact Material | Brass & BeCu, Nickel Plt. | | | |
| Wire Max | 2.5 mm ² (13 AWG) 3.9 mm (.154") Max | | | |
| Assembly | n/a | Requires Small Screwdriver | | n/a |
| Color | See How to Order | | | |
| Qty / Pkg | 100 | 50 | | 10 |

* Depress the spring loaded button, insert the wire and release. The connection is completed including a secure grip on the wire's insulation.

How to Order

| Model-# | Color (-#) | | | | | |
|---------|------------|--------|-----------|----------|---------|----------|
| | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |

| Model | CT2013-# | CT2016-# |
|-------------------------|---|-----------------------|
| Wire Attachment | Set Screw | *Spring- Loaded Clamp |
| Type | Individual | |
| IEC Rating | 30 VAC / 60 VDC | |
| Voltage Max | 1,200 VAC / VDC | |
| Current Max | 36 A | |
| Body Insulation | Polyamide (Nylon) | |
| Plug & Contact Material | Brass & BeCu, Nickel Plt. | |
| Wire Max | 2.5 mm ² (13 AWG) 3.9 mm (.154") Max | |
| Assembly | Requires Small Screwdriver | n/a |
| Color | See How to Order | |
| Qty / Pkg | 10 | |

* Depress the spring loaded clamp, insert the wire and release. The connection is completed including a secure grip on the wire's insulation.

How to Order

| Model-# | Color (-#) | | | | | |
|---------|------------|--------|-----------|----------|---------|----------|
| | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |



CT2013-2



CT2016-2

4mm Banana Plugs, Stacking

Do-It-Yourself with 2 styles of solderless wire attachment.

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

Banana Plugs

Sheath and Double



4mm Banana Plugs Sheath, In-Line

Do-It-Yourself safety plugs.
 • IEC 61010-031 rated
 • CT2989 and CT3205 3-piece assembly
 • RoHS (2011/65/EU) compliant

| Model | CT3250-# | CT3205 | CT3205W | CT2989-# | CT2989-S-# |
|-------------------------|------------------------|---|------------------------------|------------------------------|--------------------------------|
| Wire Attachment | *Spring- Loaded Button | | Set Screw | | Solder |
| Type | Individual | Set | | Individual | |
| **IEC Rating | 600 V CAT II | | 1,000 V CAT III | | 1,000 V CAT III / 600 V CAT IV |
| Current Max | 20 A | | | 36 A | |
| Body Insulation | | Polyamide (Nylon) | | | |
| Plug & Contact Material | | Brass & BeCu, Nickel Plt. | | | |
| Wire Max | | 2.5 mm ² (13 AWG) 3.9 mm (.154") Max | | | |
| Assembly | n/a | Requires 1.5 mm Allen Wrench | Includes 1.5 mm Allen Wrench | Requires 1.5 mm Allen Wrench | n/a |
| Color | See How to Order | Black & Red | | See How to Order | |
| Qty / Pkg | 10 | 1 Pair | | 10 | |

* Depress the spring loaded button, insert the wire and release. The connection is completed including a secure grip on the wire's insulation.

** IEC Rating when using equally rated lead wire.

| How to Order | | | | | | |
|--------------|------------|--------|-----------|----------|---------|----------|
| Model | Color (-#) | | | | | |
| CT3250-# | -0 Black | -2 Red | -- | -- | -- | -- |
| CT2989-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2989-S-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |



4mm Double Banana Plugs

Molded 4 mm double banana plug.
 Do-It-Yourself assembly without solder.
 • IEC 61010-031 rated
 • RoHS (2011/65/EU) compliant

| How to Order | | |
|--------------|------------|--------|
| Model | Color (-#) | |
| CT3160-# | -0 Black | -2 Red |

| Model | CT3160-# |
|-------------------------|----------------------------|
| Wire Attachment | Set Screws |
| Type | Individual |
| IEC Rating | 30 VAC / 60 VDC |
| Voltage Max | 5,000 VDC |
| Current Max | 15 A |
| Body Insulation | ABS |
| Plug & Contact Material | Brass & BeCu, Nickel Plt. |
| Wire Max | 18 - 22 AWG 5.5 mm (.21") |
| Assembly | Requires Small Screwdriver |
| Color | See How to Order |
| Quantity / Pkg | 10 |

Banana Plugs

Sheath



| Model | CT3206 | CT3206W | CT2631-# | CT2631-S-# | | |
|-------------------------|---|------------------------------|------------------------------|------------|--|--|
| Style | Straight | | | | | |
| Wire Attachment | Set Screw | | Solder | | | |
| Type | Set | | Individual | | | |
| *IEC Rating | 600 V CAT IV / 1,000 V CAT III | | | | | |
| Current Max | 36 A | | | | | |
| Body Insulation | Polyamide (Nylon) | | | | | |
| Plug & Contact Material | Brass & BeCu, Nickel Plt. | | | | | |
| Wire Max | 2.5 mm ² (13 AWG) 3.9 mm (.154") Max | | | | | |
| Assembly | Requires 1.5 mm Allen Wrench | Includes 1.5 mm Allen Wrench | Requires 1.5 mm Allen Wrench | n/a | | |
| Color | Black & Red | | See How to Order | | | |
| Qty / Pkg | 1 Pair | | 10 | | | |

* IEC Rating when using equally rated lead wire.

How to Order

| Model | Color (-#) | | | | |
|------------|------------|--------|-----------|----------|---------|
| CT2631-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue |
| CT2631-S-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue |

New

| Model | CT3204 | CT3204W | CT3203-# | CT3203-S-# | | |
|-------------------------|---|------------------------------|--------------------------------|------------|--|--|
| Style | Right-Angle | | | | | |
| Wire Attachment | Set Screw | | Solder | | | |
| Type | Set | | Individual | | | |
| *IEC Rating | 1,000 V CAT III | | 1,000 V CAT III / 600 V CAT IV | | | |
| Current Max | 20 A | | | | | |
| Body Insulation | Polyamide (Nylon) | | | | | |
| Plug & Contact Material | Brass & BeCu, Nickel Plt. | | | | | |
| Wire Max | 2.5 mm ² (13 AWG) 3.9 mm (.154") Max | | | | | |
| Assembly | Requires 1.5 mm Allen Wrench | Includes 1.5 mm Allen Wrench | Requires 1.5 mm Allen Wrench | n/a | | |
| Color | Black & Red | | See How to Order | | | |
| Qty / Pkg | 1 Pair | | 10 | | | |

* IEC Rating when using equally rated lead wire.

How to Order

| Model | Color (-#) | | | | |
|------------|------------|--------|-----------|----------|---------|
| CT3203-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue |
| CT3203-S-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue |



4mm Banana Plugs Sheath, Right-Angle

Do-It-Yourself right-angle safety plugs.

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

Banana Plugs

Retractable Sleeve



4mm Banana Plugs Retractable Sleeve, In-line or Stacking

Do-It-Yourself plugs with retractable sleeves.

- IEC 61010-031 rated
- CT3200 series 5-piece assemblies
- RoHS (2011/65/EU) compliant



| Model | CT3202 | CT3202W | CT3201-# | CT3201-S-# | CT2015-# | CT2017-# | | |
|-------------------------|---|------------------------------|------------------------------|------------|----------------------------|------------------------|--|--|
| Style | In-Line | | | | Stacking | | | |
| Wire Attachment | Set Screw | | Solder | | Set Screw | **Spring- Loaded Clamp | | |
| Type | Set | | Individual | | | | | |
| IEC Rating | *600 V CAT II | | | | 30 VAC / 60 VDC | | | |
| Voltage Max | -- | -- | -- | -- | 1,200 VAC / VDC | | | |
| Current Max | 36 A | | | | | | | |
| Body Insulation | Polyamide (Nylon) | | | | | | | |
| Plug & Contact Material | Brass & BeCu, Nickel Plt. | | | | | | | |
| Wire Max | 2.5 mm ² (13 AWG) 3.9 mm (.154") Max | | | | | | | |
| Assembly | Requires 1.5 mm Allen Wrench | Includes 1.5 mm Allen Wrench | Requires 1.5 mm Allen Wrench | n/a | Requires Small Screwdriver | n/a | | |
| Color | Black & Red | | See How to Order | | | | | |
| Qty / Pkg | 1 Pair | | 10 | | | | | |

* IEC Rating when using equally rated lead wire.

** Depress the spring loaded clamp, insert the wire and release. The connection is completed including a secure grip on the wire's insulation.

How to Order

| Model | Color (-#) | | | | | |
|------------|------------|--------|-----------|----------|---------|----------|
| CT3201-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT3201-S-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2015-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2017-# | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |



CT2060-100-2
CT2062-100-2



CT3637-100-0

4mm Banana Plug

Straight Plug to Straight Plug

Standard 4 mm banana plug for all basic interconnection applications.

- IEC 61010-031 rated
- With highly flexible silicone or PVC jacketed lead wire
- RoHS (2011/65/EU) compliant

| Model | CT2062-L-# | CT2060-L-# |
|-----------------------|-------------------|------------|
| Type | Individual | |
| IEC Rating | 30 VAC / 60 VDC | |
| Voltage Max | 1,200 VAC / VDC | |
| Current Max | 12 A | |
| Jacket Material | Silicone | PVC |
| Body Insulation | Polyamide (Nylon) | |
| Contact Material | BeCu, Nickel Plt. | |
| Wire Gauge | 18 AWG | |
| Stranding (# x Diam.) | 195 x 0.07 mm | |
| OD | 3.7 mm (.146") | |
| Length & Color | See How to Order | |
| Quantity / Pkg | 10 | |

| How to Order | | | | | | |
|--------------|----------------|--------|------|------|------|------------|
| CT2062-L-# | Length cm (-L) | | | | | Color (-#) |
| | -25 | -50 | -100 | -150 | -200 | |
| | -0 Black | -2 Red | -- | -- | -- | |
| CT2060-L-# | Length cm (-L) | | | | | Color (-#) |
| | -25 | -50 | -100 | -- | -- | |
| | -0 Black | -2 Red | -- | -- | -- | |

4mm Retractable Sleeve Banana Plug

Straight Plug to Straight Plug

Covering sleeve retracts as you plug into the jack. Banana plugs include a grey plastic insulation tip for added user protection.

- IEC 61010-031 rated
- Highly flexible silicone jacketed lead wire
- RoHS (2011/65/EU) compliant

| Model | CT3637-L-# |
|-----------------------|-------------------|
| Type | Individual |
| IEC Rating | 600 V CAT II |
| Current Max | 12 A |
| Jacket Material | Silicone |
| Body Insulation | Polyamide (Nylon) |
| Contacts Material | BeCu, Nickel Plt. |
| Wire Gauge | 18 AWG |
| Stranding (# x Diam.) | 195 x 0.07 mm |
| OD | 3.7 mm (.146") |
| Length & Color | See How to Order |
| Quantity / Pkg | 10 |

| How to Order | | | |
|------------------------|----------------|------|------|
| CT3637-L-# | Length cm (-L) | | |
| | -100 | -150 | -200 |
| | Color (-#) | | |
| -0 Black -2 Red -- | | | |

Banana Plugs

Test Leads



4mm Sheath Banana Plug Straight Plug to Straight Plug

Fixed sheath for highest user protection.

- IEC 61010-031 rated
- Models CT3751 and CT3752 UL listed
- Highly flexible silicone jacketed lead wire
- RoHS (2011/65/EU) compliant

| Model | CT3752-L | CT3751-L-# | CT2485 | CT2162-L-# |
|-----------------------|--------------------------------|-------------------|----------------|------------------|
| Type | Set | Individual | Set | Individual |
| IEC Rating | 1,000 V CAT III / 600 V CAT IV | | 1,000 V CAT IV | |
| Current Max | 10 A | | 12 A | |
| UL Listed | Yes | | -- | -- |
| Jacket Material | | Silicone | | |
| Body Insulation | | Polyamide (Nylon) | | |
| Contacts Material | | BeCu, Nickel Plt. | | |
| Wire Gauge | 18 AWG | | | |
| Stranding (# x Diam.) | 175 x 0.08 mm | | 195 x 0.07 mm | |
| OD | 4.0 mm (.157") | | 3.7 mm (.146") | |
| Length | See How to Order | | 150 cm (60") | See How to Order |
| Color | Black & Red | See How to Order | Black & Red | See How to Order |
| Quantity / Pkg | 1 Pair | 10 | 1 Pair | 10 |

| How to Order | | | | | |
|--------------|----------------|--------|------|------|------|
| CT3752-L | Length cm (-L) | | | | |
| | -- | -- | -100 | -150 | -200 |
| CT3751-L-# | Length cm (-L) | | | | |
| | -- | -- | -100 | -150 | -200 |
| CT2162-L-# | Color (-#) | | | | |
| | -0 Black | -2 Red | -- | -- | -- |
| CT2162-L-# | Length cm (-L) | | | | |
| | -25 | -50 | -100 | -150 | -200 |
| CT2162-L-# | Color (-#) | | | | |
| | -0 Black | -2 Red | -- | -- | -- |

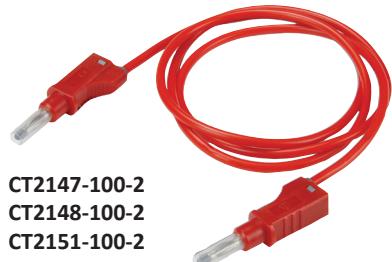
Test Leads



CT2131-100-0



CT2521-100-0



CT2147-100-2
CT2148-100-2
CT2151-100-2

4mm Stacking Banana Plug Straight Plug to Straight Plug

Stacking banana plugs are available as standard, sheath or retractable. Retractable plugs feature clear covering sleeves that retract as you plug into the jacks and have a grey plastic insulation tip for added user protection.

- IEC 61010-031 rated
- Highly flexible silicone or PVC jacketed wire
- RoHS (2011/65/EU) compliant

| Model | CT2131-L-# | CT2521-L-# | CT2148-L-# | CT2151-L-# | CT2147-L-# |
|-----------------------|-------------------|--------------------------------|--------------|----------------------------------|----------------|
| Style | Stacking Plug | Stacking Sheath Plug | | Stacking Retractable Sheath Plug | |
| Type | Individual | | | | |
| IEC Rating | 30 VAC / 60 VDC | 1,000 V CAT III / 600 V CAT IV | 600 V CAT II | | |
| Voltage Max | 1,200 VAC / VDC | -- | -- | -- | -- |
| Current Max | | 12 A | | 36 A | 12 A |
| Jacket Material | Silicone | | | | PVC |
| Body Insulation | Polyamide (Nylon) | | | | |
| Contacts Material | BeCu, Nickel Plt. | | | | |
| Wire Gauge | 18 AWG | | | 13 AWG | 18 AWG |
| Stranding (# x Diam.) | 195 x 0.07 mm | | | 651 x 0.07 mm | 195 x 0.07 mm |
| OD | 3.7 mm (.146") | | | 3.9 mm (.154") | 3.7 mm (.146") |
| Length & Color | See How to Order | | | | |
| Quantity / Pkg | 10 | | | | |

| How to Order | | | | | | |
|--------------|----------------|--------|-----------|----------|---------|----------|
| CT2131-L-# | Length cm (-L) | | | | | |
| | -25 | -50 | -100 | -150 | -200 | -- |
| CT2521-L-# | Color (-#) | | | | | |
| | -0 Black | -2 Red | -- | -- | -- | -- |
| CT2148-L-# | Length cm (-L) | | | | | |
| | -25 | -50 | -100 | -150 | -200 | -- |
| CT2151-L-# | Color (-#) | | | | | |
| | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| CT2147-L-# | Length cm (-L) | | | | | |
| | -- | -50 | -100 | -- | -- | -- |
| Color (-#) | | | | | | |
| -0 Black | | | | | | |

Banana Plugs

Test Leads



4mm Sheath Banana Plug Straight Plug to Right Angle Plug

Most common test lead set (and replacement) for handheld DMMs.

Right-angle banana plug for the meter and straight banana plug for the probe or clip.

- IEC 61010-031 rated
- Models CT3753 and CT3754 UL listed
- RoHS (2011/65/EU) compliant

| Model | CT3754-L | CT3753-L-# | CT2484 | CT2176-L-# | CT3130 | CT3132 |
|-----------------------|------------------|------------------|--------------------------------|------------------|----------------|----------------|
| Type | Set | Individual | Set | Individual | Set | Set |
| IEC Rating | | | 1,000 V CAT III / 600 V CAT IV | | | |
| Current Max | 10 A | | 12 A | | 20 A | 12 A |
| Jacket Material | | Silicone | | | PVC | Silicone |
| UL Listed | Yes | | -- | -- | -- | -- |
| Body Insulation | | | Polyamide (Nylon) | | | |
| Contacts Material | | | BeCu, Nickel Plt. | | | |
| Wire Gauge | | 18 AWG | | | 17 AWG | 18 AWG |
| Stranding (# x Diam.) | 175 x 0.08 mm | | 195 x 0.07 mm | | 259 x 0.07 mm | 195 x 0.07 mm |
| OD | 4.0 mm (.157") | | 3.7 mm (.146") | | 3.8 mm (.150") | 3.7 mm (.146") |
| Length | See How to Order | | 150 cm (60") | See How to Order | 100 cm (40") | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order | Black & Red | |
| Qty / Pkg | 1 Pair | 10 | 1 Pair | 10 | 1 Pair | |

| How to Order | | | |
|--------------|----------------|--------|------|
| CT3754-L | Length cm (-L) | | |
| | -100 | -150 | -200 |
| CT3753-L-# | Length cm (-L) | | |
| | -100 | -150 | -200 |
| CT2176-L-# | Color (-#) | | |
| | -0 Black | -2 Red | -- |
| CT2176-L-# | Length cm (-L) | | |
| | -100 | -150 | -200 |
| CT2176-L-# | Color (-#) | | |
| | -0 Black | -2 Red | -- |

Banana Plugs

Test Leads



CT3803-30



CT3802-30-2



CT3805-30



CT3804-30-0

4mm Sheath Banana Plug Sheath Plug to Insulated Alligator Clip

Convenient DMM sheath banana plug to insulated standard alligator clip.

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

| Model | CT3803-L | CT3802-L-# | CT3805-L | CT3804-L-# |
|-------------------------|--------------------------|------------------|-------------|--------------------|
| Type | Set | Individual | Set | Individual |
| One End | Straight Sheath | | | Right-Angle Sheath |
| Other End | Insulated Alligator Clip | | | |
| IEC Rating | 300 V CAT II | | | |
| Current Max | 10 A | | | |
| Jacket Material | Silicone | | | |
| Body Insulation | Polyamide (Nylon) | | | |
| Banana Contacts | BeCu, Nickel Plt. | | | |
| Alligator Jaws Opens to | .31" (7.9 mm) | | | |
| Alligator Clip | Steel, Nickel Plt. | | | |
| Wire Gauge | 18 AWG | | | |
| Stranding (# x Diam.) | 175 x 0.08 mm | | | |
| OD | 4.0 mm (.157") | | | |
| Length | See How to Order | | | |
| Color | Black & Red | See How to Order | Black & Red | See How to Order |
| Qty / Pkg | 1 Pair | 10 | 1 Pair | 10 |

| How to Order | | | |
|----------------|----------------|--------|------|
| CT3802-L-# | Length cm (-L) | | |
| | -30 | -60 | -- |
| | Color (-#) | | |
| CT3803-L | -0 Black | -2 Red | -- |
| | Length cm (-L) | | |
| CT3804-L-# | -30 | -60 | -- |
| | Length cm (-L) | | |
| | -30 | -60 | -100 |
| CT3805-L | Color (-#) | | |
| | -0 Black | -2 Red | -- |
| Length cm (-L) | | | |
| -30 | -60 | -100 | |

Test Lead Wires



Test Lead Wires

Our quality test lead wire is ideal for building do-it-yourself test leads, patch cords and test fixtures. Wires feature highly stranded copper conductors with soft silicone or PVC jackets for high flexibility, and double layers for safety and durability. All conform to IEC61010-031.

Available from 2 A to 36 A in three convenient lengths: 10, 50, and 100 m and in 6 colors. Test Lead Wire Racks are offered for storing and organizing your Test Leads.

| | |
|---------------------------------|----|
| Silicone and PVC Jacketed | 75 |
| Test Lead Racks..... | 76 |

Test Lead Wires

Silicone & PVC Jacket

Silicone Jacketed

Ideal test lead wire for building Do-It-Yourself (DIY) test leads, patch cords, and test fixtures. Silicone is the best test lead jacket material, combining high flexibility, even at low temperatures, with resistance to burns and chemicals. The conductor is highly stranded soft bare copper for additional flexibility.

- IEC 61010-031 rated
- Meets the safety requirements of IEC 61010-031
- Available in 6 colors: black, red, yellow, green, blue and white
- Available in 3 lengths: 10 m, 50 m & 100 m
- RoHS (2011/65/EU) compliant



| Model | CT2956-#-L | CT2883-#-L | CT2884-#-L | CT2799-#-L | CT2957-#-L | CT2885-#-L | CT2844-#-L |
|-----------------------|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| IEC Rating | 1,000 V CAT III / CAT IV | | | | | | |
| Current Max | 2 A | 6 A | 10 A | 12 A | 20 A | 25 A | 36 A |
| Jacket Material | Silicone | | | | | | |
| Conductor Area | 0.22 mm ² | 0.40 mm ² | 0.50 mm ² | 0.75 mm ² | 1.00 mm ² | 1.50 mm ² | 2.50 mm ² |
| Wire Gauge | 23 AWG | 21 AWG | 20 AWG | 18 AWG | 17 AWG | 15 AWG | 13 AWG |
| Stranding (# x Diam.) | 56 x 0.07 mm | 104 x 0.07 mm | 130 x 0.07 mm | 195 x 0.07 mm | 259 x 0.07 mm | 392 x 0.07 mm | 651 x 0.07 mm |
| OD | 1.4 mm (.055") | 2.1 mm (.083") | 2.7 mm (.106") | 3.7 mm (.146") | 3.8 mm (.150") | 3.9 mm (.154") | |
| Color & Length | See How to Order at bottom of page | | | | | | |

PVC Jacketed

PVC jacketed test lead wire is the choice for cost effective, high quality test leads and patch cords. The jacket features a durable colored outer layer with an inner white layer for cut or wear visibility. The conductor is highly stranded soft bare copper for additional flexibility.

- IEC 61010-031 rated
- Meets the safety requirements of IEC 61010-031
- Available in 6 colors: black, red, yellow, green, blue and white
- Available in 3 lengths: 10 m, 50 m & 100 m
- RoHS (2011/65/EU) compliant



| Model | CT2878-#-L | CT2879-#-L | CT2837-#-L | CT2880-#-L | CT2881-#-L | CT2882-#-L |
|-----------------------|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| IEC Rating | 1,000 V CAT III / CAT IV | | | | | |
| Current Max | 6 A | 10 A | 12 A | 20 A | 25 A | 36 A |
| Jacket Material | PVC | | | | | |
| Conductor Area | 0.40 mm ² | 0.50 mm ² | 0.75 mm ² | 1.00 mm ² | 1.50 mm ² | 2.50 mm ² |
| Wire Gauge | 21 AWG | 20 AWG | 18 AWG | 17 AWG | 15 AWG | 13 AWG |
| Stranding (# x Diam.) | 104 x 0.07 mm | 130 x 0.07 mm | 195 x 0.07 mm | 259 x 0.07 mm | 392 x 0.07 mm | 651 x 0.07 mm |
| OD | 2.0 mm (.079") | 2.7 mm (.106") | 3.7 mm (.146") | 3.8 mm (.150") | 3.9 mm (.154") | |
| Color & Length | See How to Order at bottom of page | | | | | |

How to Order

| Model-#-L | Color (-#) | | | | | |
|-----------|---------------|--------|-----------|----------|---------|----------|
| | -0 Black | -2 Red | -4 Yellow | -5 Green | -6 Blue | -9 White |
| | Length m (-L) | | | | | |
| | -10 | -50 | -100 | -- | -- | -- |

Test Lead Wires

Test Lead Racks

CT3273



CT2051

Wire Racks, Wall

- Wall mounted
- Mounting hardware included
- RoHS (2011/65/EU) compliant

| Model | CT3273 | CT2051 |
|--------------------|---|---|
| Capacity (approx.) | 50 Test Leads | 60 Test Leads |
| Style | Fixed | Adjustable |
| Rack Configuration | 13 slots (in 3 widths): 2 Wide slots 5.8 mm (.23") 2 Narrow slots 2.8 mm (.11") 9 Medium slots 4.2 mm (.17") | Rail: 35 cm (14") Wide; 18 Adjustable Plastic Hooks may be positioned as needed |
| Material | Steel, Black | Aluminum Rail with Plastic Hooks |



CT3274
CT3275

Wire Racks, Rolling

Suitable for laboratories or classrooms, our smooth rolling test lead racks provide stable and portable storage. The central storage tray is height adjustable and features either 100 or 200 test lead capacity.

- 5-caster base
- Height adjustable
- Central storage tray
- Some assembly required
- RoHS (2011/65/EU) compliant

| Model | CT3274 | CT3275 |
|---------------------|---|----------------|
| Capacity (approx.) | 100 Test Leads | 200 Test Leads |
| # of Racks (CT3273) | 2 | 4 |
| Central Tray | Plastic, Grey 14.6" x 10.6" x 4.1" (370 x 270 x 105 mm) | |
| Height Adjustable | 39" - 71" (1 - 1.8 m) | |



Kits

Cal Test Electronics offers a selection of instrument accessory kits that incorporate the most commonly needed items into a single package. Each kit has been designed around a specific test instrument and contains a selection of products so that you can quickly conduct performance, verification or calibration tests.

| | |
|--------------------------|-------|
| Power Supply..... | 78 |
| Function Generator and | |
| Frequency Counter..... | 79 |
| Spectrum Analyzer | 80 |
| Oscilloscope..... | 81 |
| Digital Multimeter | 82-87 |

Kits

Power Supply



CT3375A



CT3376A



CT3374A

Power Supply Kits

Three convenient kits providing the leads and adapters to connect your AC or DC bench power supply.

- IEC 61010-031 rated accessories
- RoHS (2011/65/EU) compliant
- Packaged in clear clamshell blister

| Model | CT3374A | CT3375A | CT3376A |
|---|-----------------------|-----------------------|--------------------------------|
| Description | 6-Piece Kit | 12-Piece Kit | 15-Piece Kit |
| Typically Used By | Technician | Senior Technician | Engineer |
| Grade | Basic | Enhanced | Advanced |
| Current Max | 10 A | 10 A | 36 A |
| Components | Kit Contains | | |
| Lead 4 mm Banana, Stacking Retractable, Sheath, Plug to Plug, Silicone Jacketed Wire, 18 AWG, Length 100 cm (40") | 2 (1 Black, 1 Red) | 2 (1 Black, 1 Red) | -- |
| Lead 4 mm Banana, Stacking Retractable, Sheathed, Plug to Plug, Silicone Jacketed Wire, 13 AWG, Length 100 cm (40") | -- | -- | 3 (1 Black, 1 Red, 1 Green) |
| Lead Insulated Mini Crocodile Clips, PVC Jacketed Wire, 20 AWG, Length 200 cm (80") | -- | 2 (1 Black, 1 Red) | -- |
| Adapter 6 mm Spade to 4 mm Jack | 2 (1 Black, 1 Red) | 4 (2 Black, 2 Red) | 6 (2 Black, 2 Red, 2 Green) |
| Medium Insul. Alligator Clip w/ 4 mm Jack | 2 (1 Black, 1 Red) | 2 (1 Black, 1 Red) | -- |
| Extra Large Insul. Alligator Clip w/ 4 mm Jack | -- | 2 (1 Black, 1 Red) | 3 (1 Black, 1 Red, 1 Green) |
| Adapter BNC female to 4 mm Banana Plugs | -- | -- | 1 (Black) |
| Adapter BNC male to 4 mm Banana Posts | -- | -- | 1 (Black) |
| Cable Assembly BNC male RG-58C/U, 100 cm (40") | -- | -- | 1 (Black) |

Function Generator & Frequency Counter



CT3733



CT3735



CT3734



CT3736

Function Generator and Frequency Counter Interconnect Kits

These kits provide the required cables and adapters for using effectively your instrument. Standard interconnect components will work with all major instrument models.

- RoHS (2011/65/EU) compliant
- Packaged in clear clamshell blister

| Model | CT3733 | CT3734 | CT3735 | CT3736 |
|--|-----------------|-------------|-------------------|-------------|
| Description | 4-Piece Kit | 4-Piece Kit | 6-Piece Kit | 9-Piece Kit |
| Typically Used By | Technician | Technician | Senior Technician | Engineer |
| For Frequency Counters | | x | | |
| For Function Generators | x | | x | |
| For Arbitrary Generators | | | | x |
| Connector Grade | General Purpose | | | |
| Impedance | 50 Ω | | | |
| Components | Kit Contains | | | |
| Coaxial Cable, BNC male, 50 Ω, RG-58C/U, Length 100 cm (40") | 1 | 2 | 1 | 2 |
| Coaxial Cable, BNC male to IC Clips (1 Black & 1 Red), 50 Ω, RG-58C/U, Length 100 cm (40") | 1 | -- | 1 | 1 |
| Tee Adapter, BNC female-male-female, 50 Ω | 1 | 1 | 1 | 1 |
| Adapter, BNC female to N male, 50 Ω | -- | 1 | 1 | 1 |
| Adapter, BNC female to 4 mm Banana Plug | 1 | -- | 1 | 2 |
| Attenuator, BNC male-female, 50 Ω, 20 dB, 4 GHz, 2 W | -- | -- | -- | 1 |
| Feed-Thru Terminator, BNC male-female, 50 Ω, 2 W 1% | -- | -- | 1 | 1 |

Kits

Spectrum Analyzer



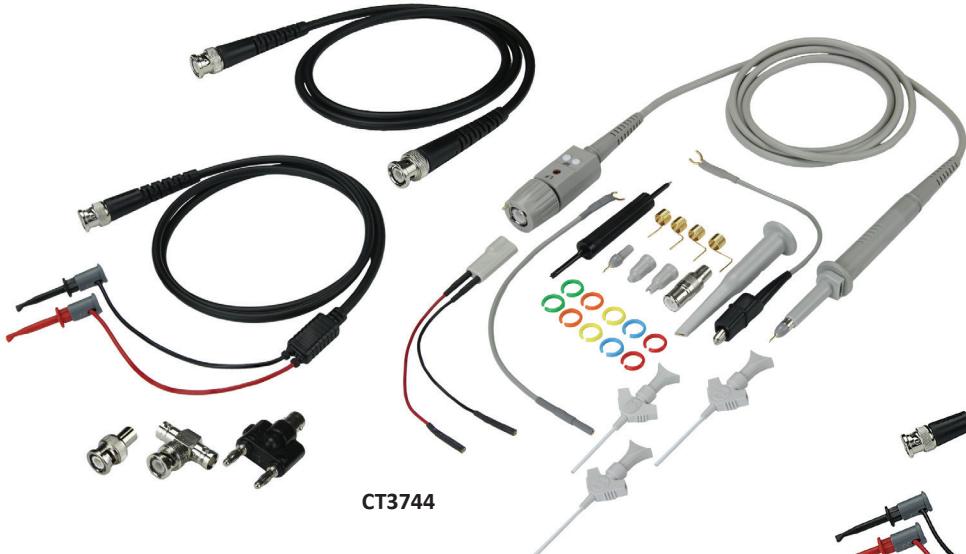
Spectrum Analyzer Kits

Three spectrum analyzer kits to choose from. Model CT3739 and CT3740 have the most common coax cables and adapters for use with spectrum analyzers up to 3 GHz. Model CT3741 provides an advanced selection of coaxial adapters, cables and attenuators for higher performance 9 GHz spectrum analyzers.

- RoHS (2011/65/EU) compliant
- Packaged in clear clamshell blister

| Model | CT3739 | CT3740 | CT3741 |
|---|-----------------|-------------------|-------------|
| Description | 9-Piece Kit | 10-Piece Kit | 9-Piece Kit |
| Typically Used By | Technician | Senior Technician | Engineer |
| For Spectrum Analyzers up to | 3 GHz | 9 GHz | |
| Grade | General Purpose | | Advanced |
| Impedance | 50 Ω | | |
| Components | Kit Contains | | |
| Coaxial Cable, BNC male, 50 Ω, RG-58C/U, Length 100 cm (40") | 2 | 2 | 1 |
| RF Cable, N male to N male, 50 Ω, 12.4 GHz, Length 100 cm (40") | -- | -- | 1 |
| Tee Adapter, BNC female-male-female, 50 Ω | 1 | 1 | 1 |
| Adapter, BNC female to N male, 50 Ω | 1 | 1 | 1 |
| Adapter, BNC female to N female, 50 Ω | 1 | 1 | -- |
| Adapter, BNC female to 4 mm Banana Plug | 1 | 1 | 1 |
| Adapter, BNC female to SMA male, 50 Ω | 1 | 1 | -- |
| Adapter, BNC male to N female, 50 Ω | -- | -- | 1 |
| Adapter, BNC male to SMA female, 50 Ω | 1 | 1 | -- |
| Adapter, N female to SMA male, 50 Ω | -- | -- | 1 |
| Terminator, BNC male, 50 Ω, +1%, 500 MHz | 1 | 1 | 1 |
| Attenuator, BNC male to female, 50 Ω, 10 dB, 4 GHz, 2 W | -- | 1 | -- |
| Attenuator, N male to female, 50 Ω | -- | -- | 1 |

Oscilloscope

**Oscilloscope Adapter Kits**

Three kits containing the most popular and commonly used cables and adapters to connect your oscilloscope with other test instruments or circuits. Model CT3742 is a basic interconnection kit; Model CT3743 includes a 100 MHz switchable 1x/10x oscilloscope probe, and Model CT3744 includes a 500 MHz 10x fixed oscilloscope probe with an enhanced accessory kit.

- IEC 61010-031 rated accessories
- RoHS (2011/65/EU) compliant
- Packaged in clear clamshell blister

| Model | CT3742 | CT3743 | CT3744 |
|--|--------------|-------------------|-------------|
| Typically Used By | Technician | Senior Technician | Engineer |
| Description | 5-Piece Kit | 6-Piece Kit | 6-Piece Kit |
| Grade | Basic | Enhanced | Advanced |
| Impedance | 50 Ω | | |
| Components | Kit Contains | | |
| Coaxial Cable, BNC male, 50 Ω, RG-58C/U, Length 100 cm (40") | 1 | 1 | 1 |
| Coaxial Cable, BNC male to MiniPro Clips (1 Black, 1 Red), 50 Ω, RG-58C/U, Length 100 cm (40") | 1 | 1 | 1 |
| Tee Adapter, BNC female-male-female, 50 Ω | 1 | 1 | 1 |
| Adapter, BNC female to 4 mm Banana Plug | 1 | 1 | 1 |
| Terminator, BNC male, 50 Ω, ±1%, 500 MHz | 1 | 1 | 1 |
| Oscilloscope Probe 100 MHz, Switchable x1/x10/R, 1.2 m (CT2674A) | -- | 1 | -- |
| Oscilloscope Probe 500 MHz, Fixed 10x with enhanced probe kit, 1.2 m (CT3288ARA) | -- | -- | 1 |



Kits

Digital Multimeter



Deluxe DMM Kit

| Model | CT2300 |
|-------|--------|
|-------|--------|

- IEC 61010-031 rated accessories
- PVC jacketed lead wire
- Replaceable tip probe, 4 mm banana plug tip and 2 mm smooth tip
- Cap on probe body tip provides CAT III rating
- 0.7 mm stainless steel spring tip probe for fine work
- Extra large alligator clips for electrical work
- RoHS (2011/65/EU) compliant
- Packaged in polybag

| Kit Contains | |
|---|---|
| (2) Modular Probes: (1) Black, (1) Red - (CT2268) | |
| (2) Spring Tip Mini-Probes: (1) Black, (1) Red - (CT2665) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, PVC Jacket, 100 cm (40)": (1) Black, (1) Red - (CT3130) | |
| (2) Flex Pincer Clips: (1) Black, (1) Red - (CT2487) | |
| (2) Insulated Alligator Clips, Extra Large: (1) Black, (1) Red - (CT3286) | |
| (2) Adapters, 4 mm Banana Plug to Banana Jack: (1) Black, (1) Red - (CT3089) | |
| (2) Adapters, Spade 6 mm to 4 mm Jack: (1) Black, (1) Red - (CT2661) | |
| Rating | |
| Modular Probe Bodies | 1,000 V CAT III w/cap, (CAT II w/o), 36 A |
| Spring Tip Probe Bodies | 600 V CAT II, 1 A |
| Test Leads | 1,000 V CAT III, 20 A |
| Flex Pincer Clips | 1,000 V CAT II, 6 A |
| Extra Large Alligator Clips | 1,000 V CAT III / 600 V CAT IV, 36 A |
| Plug Adapters | <30 VAC / <60 VDC, 10 A |
| Spade Lugs | <30 VAC / <60 VDC, 36 A |



New

General Purpose Handheld DMM Kit

| Model | CT2696C |
|-------|---------|
|-------|---------|

- 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
- RoHS (2011/65/EU) compliant
- Packaged in clear PVC pouch

| Kit Contains | |
|--|--|
| (2) Probe Bodies, 2 mm Tip w/Safety Cap: (1) Black, (1) Red - (CT3975) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, Silicone Jacket, 150 cm (60)": (1) Black, (1) Red - (CT3754-150) | |
| (2) Adapters, Spade 6 mm to 4 mm Jack: (1) Black, (1) Red - (CT2661) | |
| (2) Sprung Hooks: (1) Black, (1) Red - (CT3947) | |
| (2) Insulated Alligator Clips, Extra Large: (1) Black, (1) Red - (CT3286) | |
| Rating | |
| Probe Bodies | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Test Leads | 1,000 V CAT III, 10 A |
| Spade Lugs | <30 VAC / <60 VDC, 36 A |
| Sprung Hooks | 300 V CAT II, 3 A |
| Extra Large Alligator Clips | 1,000 V CAT III / 600 V CAT IV, 36 A |

Digital Multimeter



Deluxe Electronic DMM Kit

| Model | CT2622 |
|-------|--------|
|-------|--------|

- IEC 61010-031 rated accessories
- Ideal for high-density circuit testing
- Silicone jacketed lead wire
- Cap on probe body tip provides CAT III rating
- 0.7 mm stainless steel spring tip probe for fine work
- RoHS (2011/65/EU) compliant
- Packaged in clear PVC pouch

| Kit Contains |
|--|
| (2) Probe Bodies, 4 mm Banana Plug Tip: (1) Black, (1) Red - (CT2483) |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, Silicone Jacket, 150 cm (60"): (1) Black, (1) Red - (CT2484) |
| (2) Spring Tip Mini-Probes, 4 mm Jack: (1) Black, (1) Red - (CT2665) |
| (2) MiniFlex Clips to 4 mm Jacks, Silicone 0.40, 10 cm (4"): (1) Black, (1) Red - (CT3096) |
| (2) Sprung Hooks: (1) Black, (1) Red - (CT2664) |

| Rating | |
|-------------------------|---|
| Probe Bodies | 1,000 V CAT III w/cap, (CAT II w/o), 36 A |
| Spring Tip Probe Bodies | 600 V CAT II, 1 A |
| Test Leads | 1,000 V CAT III / 600 V CAT IV, 12 A |
| MiniFlex Clip Leads | <30 VAC / <60 VDC, 1 A |
| Sprung Hooks | <30 VAC / <60 VDC, 5 A |

Deluxe Surface Mount DMM Kit

| Model | CT2970 |
|-------|--------|
|-------|--------|

- IEC 61010-031 rated accessories
- 0.7 mm stainless steel spring tip probe for fine work
- Silicone jacketed lead wire
- MiniFlex clips w/rotating pincers
- MicroClip test clips for SMD components
- RoHS (2011/65/EU) compliant
- Packaged in clear PVC pouch

| Kit Contains |
|--|
| (2) Spring Tip Mini-Probes, 4 mm Jack: (1) Black, (1) Red - (CT2665) |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, Silicone Jacket, 100 cm (40"): (1) Black, (1) Red - (CT3754-100) |
| (2) MiniFlex Test Clips w/ .031" Pins: (1) Black, (1) Red - (CT3101) |
| (2) MicroClip Test Clips w/ .031" Pins: (1) Black, (1) Red - (CT3100) |
| (2) MicroLeads, 0.031" Jack to 4 mm Jack, Silicone Jacket, 10 cm (4"): (1) Black, (1) Red - (CT3099) |

| Rating | |
|-------------------------|--------------------------|
| Spring Tip Probe Bodies | 600 V CAT II, 1 A |
| Test Leads | 1,000 V CAT III, 10 A |
| MiniFlex Test Clips | <30 VAC / <60 VDC, 1 A |
| MicroClip Test Clips | <30 VAC / <60 VDC, 0.5 A |
| MicroLeads | <30 VAC / <60 VDC, 2 A |

Kits

Digital Multimeter



Replacement DMM

Probe Body Accessory Kit

| Model | CT3979-150 |
|--|--|
| • IEC 61010-031 rated accessories | |
| • Probe bodies accept 4 mm sheath banana plugs | |
| • Cap on probe tip provides CAT III / CAT IV rating | |
| • Standard 2 mm x 19 mm probe tips | |
| • Silicone jacketed lead wire | |
| • Convenient black and red pairs | |
| • RoHS (2011/65/EU) compliant | |
| • Packaged in polybag | |
| Kit Contains | |
| (2) Probe Bodies, 2 mm Tip w/Safety Cap: (1) Black, (1) Red - (CT3975) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, Silicone Jacket, 150 cm (60"): (1) Black, (1) Red - (CT3754-150) | |
| (2) Sprung Hooks, (1) Black, (1) Red - (CT3947) | |
| (2) Alligator Clips, (1) Black, (1) Red - (CT3943) | |
| (2) Spade Lugs, (1) Black, (1) Red - (CT3945) | |
| (2) Extended Tips, (1) Black, (1) Red - (CT3941) | |
| Rating | |
| Probe Bodies | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Test Leads | 1,000 V CAT III, 10 A |
| Sprung Hooks | 300 V CAT II, 3 A |
| Alligator Clips | 300 V CAT II, 5 A |
| Spade Lugs | <30 VAC / <60 VDC, 5 A |
| Extended Tips | 300 V CAT II, 3 A |

Handheld DMM

Probe Lead Accessory Kit

| Model | CT3987-120 |
|--|--|
| • IEC 61010-031 rated accessories | |
| • Probe Leads w/ 4 mm right-angle sheath banana plugs | |
| • Cap on probe tip provides CAT III / CAT IV rating | |
| • Standard 2 mm x 19 mm probe tips | |
| • Silicone jacketed lead wire | |
| • Convenient black and red pairs | |
| • RoHS (2011/65/EU) compliant | |
| • Packaged in polybag | |
| Kit Contains | |
| (2) Probe Leads, 2 mm Tip w/Safety Cap, 4 mm Right-Angle Sheath Plug, Silicone Jacket, 120 cm (48"): (1) Black, (1) Red - (CT3985-120) | |
| (2) Sprung Hooks, (1) Black, (1) Red - (CT3947) | |
| (2) Alligator Clips, (1) Black, (1) Red - (CT3943) | |
| (2) Spade Lugs, (1) Black, (1) Red - (CT3945) | |
| (2) Extended Tips, (1) Black, (1) Red - (CT3941) | |
| Rating | |
| Probe Leads | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Sprung Hooks | 300 V CAT II, 3 A |
| Alligator Clips | 300 V CAT II, 5 A |
| Spade Lugs | <30 VAC / <60 VDC, 5 A |
| Extended Tips | 300 V CAT II, 3 A |

Digital Multimeter

New**Basic Electrical DMM Kit**

| | |
|--------------|----------------|
| Model | CT3738C |
|--------------|----------------|

- IEC 61010-031 rated access
- Silicone jacketed lead wire
- Cap on probe body tip provides CAT III / CAT IV rating
- Alligator clip snap-locks to probe body
- RoHS (2011/65/EU) compliant
- Includes tri-fold nylon pouch

**New****Electrical DMM Kit**

| | |
|--------------|----------------|
| Model | CT2621C |
|--------------|----------------|

- 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
- RoHS (2011/65/EU) compliant
- Includes tri-fold nylon pouch

Introductory DMM Probe Body Accessory Kit

| | |
|--------------|-------------------|
| Model | CT3977-150 |
|--------------|-------------------|

- IEC 61010-031 rated accessories
- Probe bodies accept 4 mm sheathed banana plugs
- Standard 2 mm x 19 mm probe tips
- Sprung hooks snap-lock to probe bodies
- Silicone jacketed lead wire
- Cap on probe tip provides CAT III / CAT IV rating
- Convenient black and red pairs
- RoHS (2011/65/EU) compliant
- Packaged in polybag



| Kit Contains | |
|--|--|
| (2) Probe Bodies, 2 mm Tip w/Safety Cap: (1) Black, (1) Red - (CT3975) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, Silicone Jacket, 150 cm (60"): (1) Black, (1) Red - (CT3754-150) | |
| (2) Sprung Hooks, (1) Black, (1) Red - (CT3947) | |
| Rating | |
| Probe Bodies | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Test Leads | 1,000 V CAT III, 10 A |
| Sprung Hooks | <30 VAC / <60 VDC, 36 A |
| Rigid Alligator Clips | 1,000 V CAT III, 20 A |
| Extra Large Alligator Clips | 1,000 V CAT III / 600 V CAT IV, 36 A |

Kits

Digital Multimeter



Surface Mount DMM Kit

| Model | CT2843 |
|-------|--------|
|-------|--------|

- IEC 61010-031 rated accessories
- Extended probe bodies w/ sharp stainless steel tips
- Silicone jacketed lead wire
- RoHS (2011/65/EU) compliant
- Packaged in polybag

| Kit Contains | |
|--|-----------------------|
| (2) Slim-Line Probe Bodies w/Fine Stainless Steel Tip: (1) Black, (1) Red - (CT2662) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, Silicone Jacket, 150 cm (60"): (1) Black, (1) Red - (CT2484) | |
| Rating | |
| Extended Probe Bodies | 1,000 V CAT IV, 16 A |
| Test Leads | 1,000 V CAT III, 12 A |

Basic DMM Kit



| Model | CT2299 |
|-------|--------|
|-------|--------|

- IEC 61010-031 rated accessories
- PVC jacketed lead wire
- Replaceable tip probe, 4 mm banana plug tip and 2 mm smooth tip
- Cap on probe body tip provides CAT III rating
- RoHS (2011/65/EU) compliant
- Packaged in polybag

| Kit Contains | |
|---|---|
| (2) Modular Probes: (1) Black, (1) Red - (CT2268) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Right-Angle Sheath Plug, PVC Jacket, 100 cm (40"): (1) Black, (1) Red - (CT3130) | |
| (2) Flex Pincer Clips: (1) Black, (1) Red - (CT2487) | |
| Probe Bodies | 1,000 V CAT III w/cap, (CAT II w/o), 36 A |
| Test Leads | 1,000 V CAT III, 20 A |
| Flex Pincer Clips | 1,000 V CAT II, 6 A |

- IEC 61010-031 rated accessories
- Probe leads w/ 4 mm straight sheath banana plugs
- Cap on probe tip provides CAT III / CAT IV rating
- Standard 2 mm x 19 mm probe tips
- Silicone jacketed lead wire
- Convenient black and red pairs
- RoHS (2011/65/EU) compliant
- Packaged in polybag

| Kit Contains | |
|---|--|
| (2) Probe Leads, 2 mm Tip w/Safety Cap, 4 mm Straight Sheath Plug, Silicone Jacket, 120 cm (48"): (1) Black, (1) Red - (CT3981-120) | |
| (2) Sprung Hooks, (1) Black, (1) Red - (CT3947) | |
| (2) Alligator Clips, (1) Black, (1) Red - (CT3943) | |
| (2) Spade Lugs, (1) Black, (1) Red - (CT3945) | |
| (2) Extended Tips, (1) Black, (1) Red - (CT3941) | |
| Rating | |
| Probe Leads | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Sprung Hooks | 300 V CAT II, 3 A |
| Alligator Clips | 300 V CAT II, 5 A |
| Spade Lugs | <30 VAC / <60 VDC, 5 A |
| Extended Tips | 300 V CAT II, 3 A |



Bench DMM Probe Lead Accessory Kit

| Model | CT3983-120 |
|-------|------------|
|-------|------------|

Digital Multimeter

**New**
**General Purpose Bench
DMM Kit**

| Model | CT2695C |
|-------|---------|
|-------|---------|

- 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
- RoHS (2011/65/EU) compliant
- Packaged in clear PVC pouch

| Kit Contains | |
|--|--|
| (2) Probe Bodies, 2 mm Tip w/Safety Cap: (1) Black, (1) Red - (CT3975) | |
| (2) Banana Test Leads, 4 mm Sheath Plug to Sheath Plug, Silicone Jacket, 150 cm (60)": (1) Black, (1) Red - (CT3752-150) | |
| (2) Adapters, Spade 6 mm to 4 mm Jack: (1) Black, (1) Red - (CT2661) | |
| (2) Sprung Hooks: (1) Black, (1) Red - (CT3947) | |
| (2) Insulated Alligator Clips, Extra Large: (1) Black, (1) Red - (CT3286) | |
| Rating | |
| Probe Bodies | 1,000 V CAT III / 600 V CAT IV w/cap, (CAT II w/o), 10 A |
| Test Leads | 1,000 V CAT III, 10 A |
| Spade Lugs | <30 VAC / <60 VDC, 36 A |
| Sprung Hooks | 300 V CAT II, 3 A |
| Extra Large Alligator Clips | 1,000 V CAT III / 600 V CAT IV, 36 A |


**Deluxe Bench
DMM Kit**

| Model | CT3377 |
|-------|--------|
|-------|--------|

- IEC 61010-031 rated accessories
- 0.7 mm stainless steel spring tip probe for fine work
- Silicone jacketed lead wire
- Extra test leads for meter calibration process
- SMD test tweezer for detailed work
- RoHS (2011/65/EU) compliant
- Packaged in clear clamshell blister

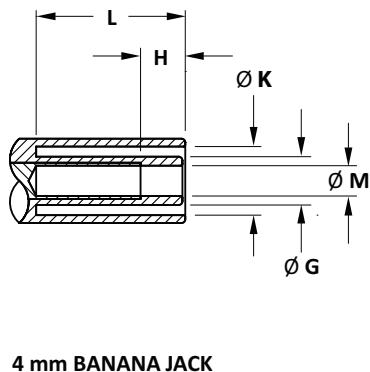
| Kit Contains | |
|--|--------------------------------------|
| (2) Spring Tip Mini-Probes, 4 mm Jack: (1) Black, (1) Red - (CT2665) | |
| (4) Banana Test Leads, 4 mm Sheath Plug to Sheath Plug, Silicone Jacket, 100 cm (40)": (2) Black, (2) Red - (CT3132) | |
| (1) Adapter, Insulated BNC male to 4 mm Safety Jack - (CT2412) | |
| (2) Adapters, 4 mm Banana Plug to Jack: (1) Black, (1) Red - (CT3089) | |
| (2) MiniFlex Clips to 4 mm Jacks, Silicone Jacket, 10 cm (4)": (1) Black, (1) Red - (CT3096) | |
| (2) Adapters, Spade 6 mm to 4 mm Jack: (1) Black, (1) Red - (CT2661) | |
| (2) Leads, MiniPro Clips to 4 mm Jacks, PVC Jacket, 10 cm (4)": (1) Black, (1) Red - (CT3280) | |
| (1) Tweezer Test Lead Set, 4 mm Plug - (CT2301) | |
| Rating | |
| Spring Tip Probe Bodies | 600 V CAT II, 1 A |
| Test Leads | 1,000 V CAT III / 600 V CAT IV, 12 A |
| BNC Adapter | 500 V CAT 0, 3 A |
| Plug Adapters | <30 VAC / <60 VDC, 10 A |
| MiniFlex Clip Leads | <30 VAC / <60 VDC, 1 A |
| Spade Lugs | <30 VAC / <60 VDC, 36 A |
| MiniPro Clip Leads | <30 VAC / <60 VDC, 6 A |
| Tweezer Test Lead Set | 400 Vrms, 2 A |

Technical Reference

Banana Plug 101

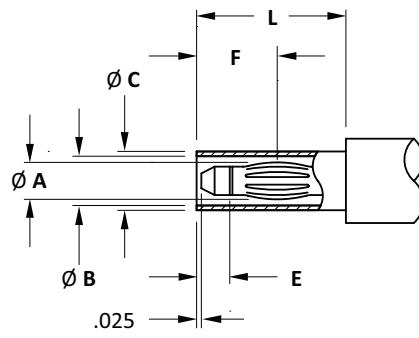
Since its introduction over 90 years ago, the banana plug connector has become the standard single wire connection device for electronic and electrical test equipment. The plug has evolved into a high quality copper alloy contact spring that plugs into a 4 mm (.157") diameter banana jack (socket). The standard spacing for two banana jacks side-by-side is 19.06 mm (.75").

General dimensions for 4 mm banana plugs and jacks:



4 mm BANANA JACK

With the introduction of safety standards in the 1980's, banana plugs acquired a cover sheath over the exposed metal contact to enhance user protection. The current international safety standard, IEC 61010-031, *Safety requirements for electrical equipment for measurement, control and lab use – Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test*, defines dimensions of sheath banana plugs for measurement categories II, III or IV up to 1,000 V.



4 mm BANANA PLUG

Dimensions Key:

A = Ø .154 ± .002 (Ø 3.90 mm ± .05 mm) – Compressed

B ≥ Ø .26 (Ø 6.6 mm)

C ≤ Ø .31 mm (Ø 7.9 mm)

.10 ≤ E ≤ .24 (2.6 mm ≤ E ≤ 6 mm)

F ≤ .47 (12 mm) – Center of contact point

G ≤ Ø .25 (Ø 6.4 mm)

.16 ≤ H ≤ .24 (4 mm ≤ H ≤ 6 mm)

K ≥ Ø .32 (Ø 8.1 mm)

L ≥ .79 (20 mm)

M = Ø .157 ± .002 (Ø 4 mm ± .05 mm)

– For E and H, minimum values with plastic tip, otherwise spacing shall be at least .10" (2.6 mm)

– Tolerance on dimensions not otherwise noted: ± .004 (0.1 mm)

Measurement Categories:

(Per IEC 61010-031)

Measurement categories are based on location as related to the mains supply where measurement can be made.

0 (no category) – circuits that are not directly connected to mains.

Examples are automobiles or other battery operated circuits or devices.

Category II – applicable to circuits connected directly to sockets outlets of the low-voltage mains.

Examples are consumer appliances, power tools, or the consumer side of socket outlets.

Typical short circuit currents: < 10 kA

Category III – applicable to circuits connected to the distribution part of a building's low-voltage mains.

Examples are power distribution boards, solar cell power assemblies, circuit boxes, circuit breakers, switches and industrial equipment.

Typical short circuit currents: > 10 kA

Category IV – applicable to circuits connected at the source of the building's low-voltage mains.

Examples are measurements on devices installed before the main fuse or circuit breaker in a building.

Typical short circuit currents: > 50 kA

These are high energy circuits so great precautions must be taken while working with these.

The measurement category of a combination of probe, lead and/or accessory is the lower of their respective category ratings.

Within the scope of IEC 61010-031 there are four defined probe assembly types that include banana plugs. The types are A, B, C & D with banana plugs falling under types A and D.

Type A: Non-attenuating assemblies rated for direct connection to voltages exceeding 30 Vrms / 42.4 Vpeak / 60 VDC.

Type D: Non-attenuating assemblies rated for direct connection to voltages not exceeding 30 Vrms / 42.4 Vpeak / 60 VDC.

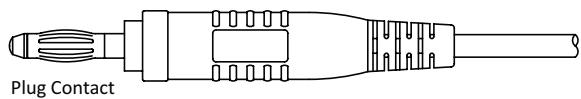
Below are descriptions of the most common banana plugs.

Banana Plug (Type D)

Features an exposed compliant contact spring and an insulation housing. It plugs into both standard and safety 4 mm banana jacks. Although it can operate at much high voltages, the plug is not recommended for handheld use above 30 VAC / 60 VDC (IEC 61010-031) as the exposed contact is capable of rendering an electric shock.

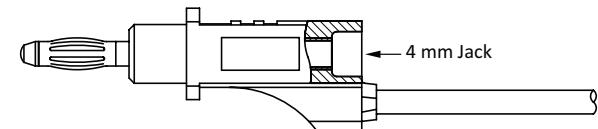
Stacking Banana Plug (Type D)

Has a banana plug on one end and a banana jack (receptacle) on the other end of its insulated housing. This allows another banana plug to share the same test point.



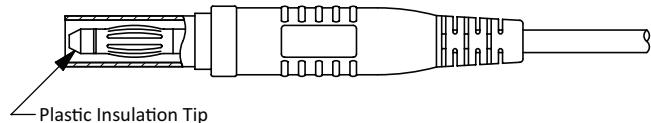
Sheath Banana Plug (Type A)

Also known as a shrouded, sleeved or safety banana plug. It features a fixed protective sheath over the spring contact that prevents unintentional contact. This plug only fits into safety banana jacks, which feature a recessed ring around their connection jack. This plug is recommended for all CAT III and IV applications.



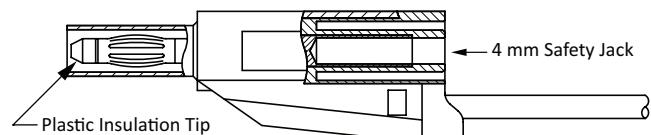
Stacking Sheath Banana Plug (Type A)

Similar to the stacking banana plug, the plug features a sheath banana plug on one end and a safety banana jack on the other. Recommended for all CAT III and IV applications.



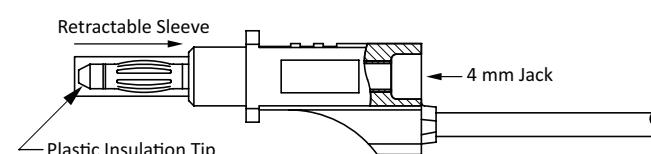
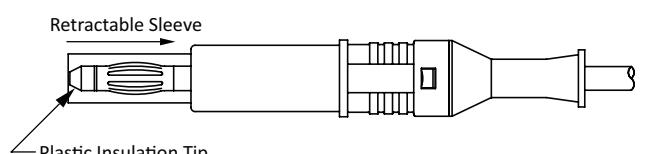
Retractable Sheath Banana Plugs (Type A)

Feature a spring-loaded protective plastic sheath that prevents unintentional contact yet slides back when engaging a banana jack. An insulator tip on the plug's contact provides further user protection. Retractable sheath banana plugs are for CAT II applications.



Stacking Retractable Sheath Banana Plug (Type A)

As with the other stacking banana plugs, it features a plug and a female jack in its housing. But, the retractable sleeve over the plug makes it one of the most versatile banana plugs available, usable with all types of banana jacks. Retractable sheath banana plugs are for CAT II applications.



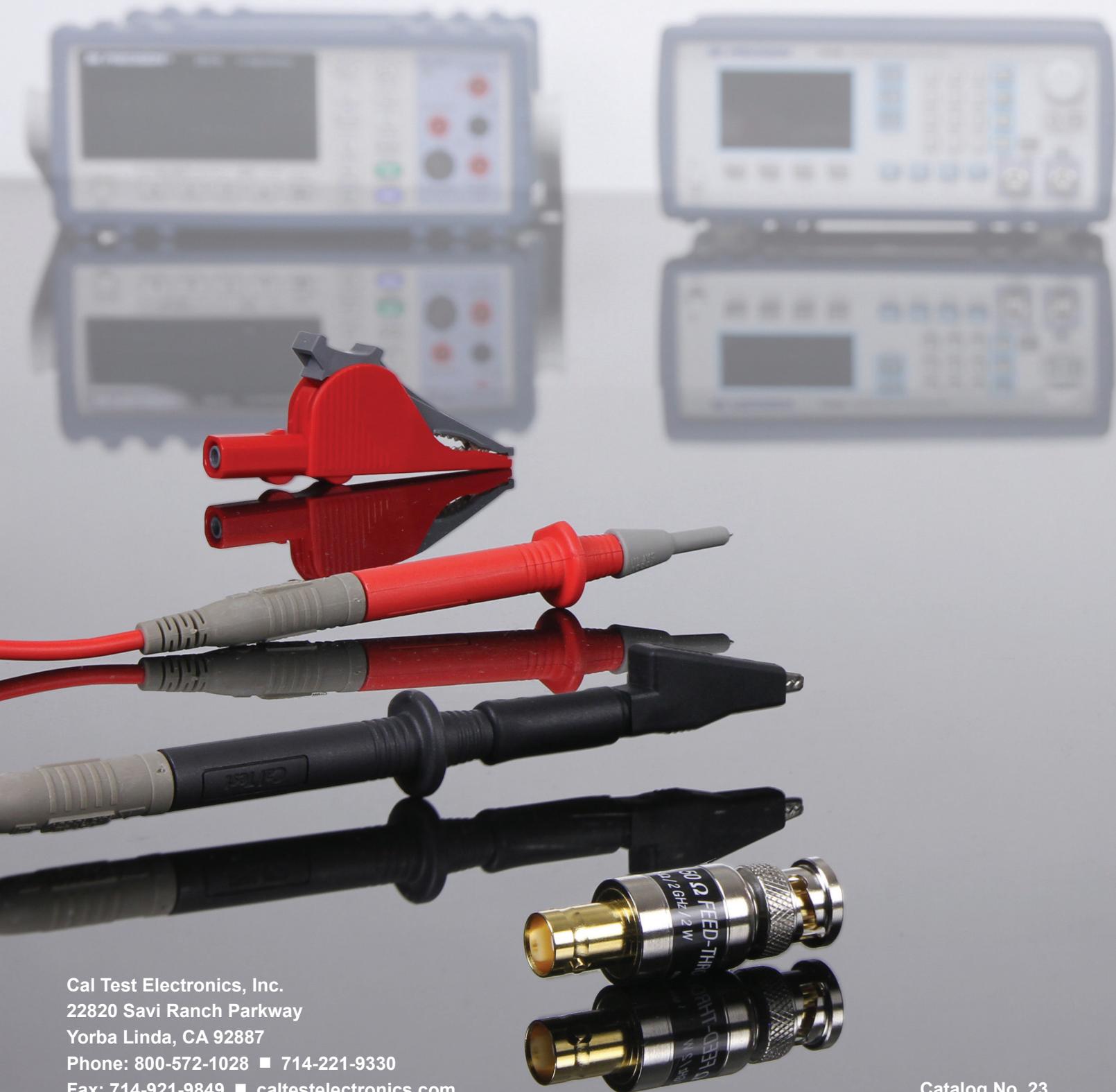
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Index

| Model No. | Page | Model No. | Page | Model No. | Page | Model No. | Page | Model No. | Page |
|---------------|------|-----------------|------|----------------|------|-----------------|-------|--------------------|------|
| CP6220 | 22 | CT2401 | 38 | CT2710 | 20 | CT2919 | 62 | CT3195 | 33 |
| CP6550 | 22 | CT2405A | 46 | CT2711A | 20 | CT2939 | 49 | CT3196 | 33 |
| CP6770 | 22 | CT2410 | 50 | CT2712A | 20 | CT2940 | 49 | CT3197B | 15 |
| CP6990 | 22 | CT2411 | 51 | CT2713A | 20 | CT2941 | 50 | CT3201 | 68 |
| CT2002 | 65 | CT2412 | 50 | CT2714 | 20 | CT2942 | 56 | CT3201-S | 68 |
| CT2011 | 65 | CT2417 | 56 | CT2715 | 20 | CT2944 | 7, 55 | CT3202 | 68 |
| CT2013 | 65 | CT2473 | 29 | CT2758 | 52 | CT2956 | 75 | CT3202W | 68 |
| CT2015 | 68 | CT2483 | 27 | CT2759 | 52 | CT2957 | 75 | CT3203 | 67 |
| CT2016 | 65 | CT2484 | 72 | CT2760 | 52 | CT2960A | 15 | CT3203-S | 67 |
| CT2017 | 68 | CT2485 | 70 | CT2761 | 52 | CT2961A | 15 | CT3204 | 67 |
| CT2051 | 76 | CT2487 | 38 | CT2762 | 48 | CT2962A | 15 | CT3204W | 67 |
| CT2060 | 69 | CT2488 | 39 | CT2763 | 48 | CT2965 | 39 | CT3205 | 66 |
| CT2062 | 69 | CT2489 | 38 | CT2765 | 51 | CT2966 | 39 | CT3205W | 66 |
| CT2131 | 71 | CT2490A | 37 | CT2766 | 51 | CT2970 | 83 | CT3206 | 67 |
| CT2147 | 71 | CT2521 | 71 | CT2771 | 48 | CT2982B | 15 | CT3206W | 67 |
| CT2148 | 71 | CT2551 | 44 | CT2789A | 25 | CT2985 | 50 | CT3207 | 59 |
| CT2151 | 71 | CT2553 | 29 | CT2799 | 75 | CT2987 | 45 | CT3207W | 59 |
| CT2162 | 70 | CT2575 | 62 | CT2830 | 60 | CT2988 | 28 | CT3208 | 33 |
| CT2176 | 72 | CT2576 | 27 | CT2837 | 75 | CT2989 | 66 | CT3209 | 33 |
| CT2213 | 59 | CT2592 | 44 | CT2838A | 20 | CT2989-S | 66 | CT3210 | 33 |
| CT2215 | 59 | CT2593-1 | 8 | CT2840RA | 16 | CT3041 | 29 | CT3211 | 33 |
| CT2220 | 63 | CT2593-2 | 8 | CT2841A | 17 | CT3089 | 29 | CT3212 | 33 |
| CT2224 | 63 | CT2621C | 85 | CT2843 | 86 | CT3096 | 44 | CT3217 | 45 |
| CT2228 | 63 | CT2622 | 83 | CT2844 | 75 | CT3099 | 42 | CT3218 | 45 |
| CT2230 | 63 | CT2631 | 67 | CT2845 | 42 | CT3100 | 42 | CT3230 | 57 |
| CT2232 | 63 | CT2631-S | 67 | CT2846 | 42 | CT3101 | 44 | CT3249 | 65 |
| CT2234 | 63 | CT2661 | 29 | CT2847 | 42 | CT3130 | 72 | CT3250 | 66 |
| CT2236 | 60 | CT2662 | 28 | CT2848 | 43 | CT3132 | 72 | CT3251 | 37 |
| CT2238 | 60 | CT2663 | 29 | CT2850 | 17 | CT3133 | 16 | CT3264 | 57 |
| CT2240 | 60 | CT2664 | 27 | CT2870 | 42 | CT3133RA | 16 | CT3269 | 57 |
| CT2242 | 60 | CT2665 | 28 | CT2878 | 75 | CT3134 | 59 | CT3270 | 57 |
| CT2243 | 61 | CT2666A | 26 | CT2879 | 75 | CT3134-S | 59 | CT3273 | 76 |
| CT2244 | 61 | CT2667 | 60 | CT2880 | 75 | CT3145 | 33 | CT3274 | 76 |
| CT2245 | 61 | CT2674A | 17 | CT2881 | 75 | CT3146 | 33 | CT3275 | 76 |
| CT2246A | 60 | CT2675A | 17 | CT2882 | 75 | CT3149 | 62 | CT3276 | 65 |
| CT2247 | 62 | CT2676A | 16 | CT2883 | 75 | CT3150 | 62 | CT3277SA | 17 |
| CT2248 | 29 | CT2676ARA | 16 | CT2884 | 75 | CT3151 | 62 | CT3280 | 46 |
| CT2264 | 28 | CT2678 | 16 | CT2885 | 75 | CT3151SP | 62 | CT3286 | 37 |
| CT2265 | 27 | CT2695C | 87 | CT2887 | 42 | CT3158 | 57 | CT3288RA | 16 |
| CT2266 | 28 | CT2696C | 82 | CT2900A | 25 | CT3160 | 66 | CT3288ARA | 16 |
| CT2268 | 27 | CT2700 | 26 | CT2904 | 60 | CT3161 | 50 | CT3290RA | 13 |
| CT2299 | 86 | CT2701A | 53 | CT2906 | 60 | CT3180 | 45 | CT3290RA-PRO | 13 |
| CT2300 | 82 | CT2702A | 53 | CT2908 | 60 | CT3183 | 46 | CT3312 | 51 |
| CT2301 | 45 | CT2703 | 17 | CT2910 | 60 | CT3184-CC | 46 | CT3313 | 51 |
| CT2388 | 28 | CT2704 | 17 | CT2911 | 61 | CT3185 | 46 | CT3320 | 49 |
| CT2392A | 37 | CT2704SA | 17 | CT2912 | 61 | CT3187 | 46 | CT3321 | 49 |
| CT2394 | 36 | CT2707 | 16 | CT2913 | 61 | CT3188 | 46 | CT3322 | 49 |
| CT2399 | 38 | CT2708 | 20 | CT2914 | 61 | CT3189 | 33 | CT3328 | 48 |
| CT2400 | 39 | CT2709A | 20 | CT2915 | 61 | CT3194 | 33 | CT3330 | 56 |

Index

| Model No. | Page |
|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|------------------|-------------|
| CT3331 | 56 | CT3654 | 14 | CT3752 | 70 | CT3978 | 31 | CTM-34..... | 35 |
| CT3333 | 56 | CT3655 | 14 | CT3753 | 72 | CT3979 | 84 | CTM-34C..... | 35 |
| CT3334 | 55 | CT3659 | 43 | CT3754 | 72 | CT3980 | 26 | CTM-46A..... | 40 |
| CT3340 | 49 | CT3661 | 14 | CT3755 | 39 | CT3981 | 26 | CTM-60..... | 35 |
| CT3341 | 51 | CT3662 | 21 | CT3756 | 39 | CT3982 | 26 | CTM-60C..... | 35 |
| CT3346 | 48 | CT3667 | 14 | CT3759 | 39 | CT3983 | 86 | CTM-60CS..... | 35 |
| CT3348 | 48 | CT3668 | 20 | CT3760 | 39 | CT3984 | 25 | CTM-60S..... | 35 |
| CT3350 | 52 | CT3669 | 21 | CT3761 | 39 | CT3985 | 25 | CTM-60TBO..... | 35 |
| CT3351 | 52 | CT3672 | 14 | CT3762 | 39 | CT3986 | 25 | CTM-60U..... | 35 |
| CT3353 | 55 | CT3673 | 53 | CT3775 | 27 | CT3987 | 84 | CTM-60X..... | 35 |
| CT3369A | 54 | CT3674 | 53 | CT3776 | 27 | CT3994 | 31 | CTM-62..... | 35 |
| CT3374A | 78 | CT3675 | 14 | CT3802 | 73 | CT3997 | 32 | CTM-63..... | 36 |
| CT3375A | 78 | CT3676 | 14 | CT3803 | 73 | CT3998 | 32 | CTM-63C..... | 36 |
| CT3376A | 78 | CT3677 | 14 | CT3804 | 73 | CT3999 | 32 | CTM-65..... | 37 |
| CT3377 | 87 | CT3678 | 14 | CT3805 | 73 | CT4024 | 15 | CTM-652..... | 37 |
| CT3382A | 55 | CT3679 | 21 | CT3809 | 36 | CT4025 | 15 | CTM-75K..... | 41 |
| CT3387 | 48 | CT3681 | 10 | CT3810 | 36 | CT4026 | 15 | CTM-78K..... | 41 |
| CT3388 | 52 | CT3683 | 10 | CT3823 | 21 | CT4028 | 15 | CTM-8681..... | 41 |
| CT3389 | 49 | CT3684 | 12 | CT3888 | 50 | CT4068 | 9 | CTM-8783..... | 41 |
| CT3390 | 49 | CT3685 | 12 | CT3889 | 50 | CT4076 | 11 | GE1501..... | 18 |
| CT3391 | 49 | CT3686 | 8 | CT3940 | 30 | CT4078 | 11 | GE1511..... | 18 |
| CT3396 | 56 | CT3687 | 8 | CT3941 | 30 | CT4079 | 11 | GE1511RA..... | 18 |
| CT3407 | 33 | CT3688 | 12 | CT3942 | 30 | CT4121 | 7 | GE1521..... | 18 |
| CT3408 | 33 | CT3723 | 10 | CT3943 | 30 | CT4122 | 7 | GE1521SA..... | 18 |
| CT3438 | 37 | CT3733 | 79 | CT3944 | 30 | CT4123 | 7 | GE2501..... | 18 |
| CT3441 | 37 | CT3734 | 79 | CT3945 | 30 | CTM-21APN..... | 40 | GE2511..... | 18 |
| CT3449 | 37 | CT3735 | 79 | CT3946 | 30 | CTM-21CPN..... | 40 | GE2511RA..... | 18 |
| CT3637 | 69 | CT3736 | 79 | CT3947 | 30 | CTM-23..... | 40 | GE2521..... | 18 |
| CT3645 | 14 | CT3738C | 85 | CT3948 | 31 | CTM-25..... | 40 | GE3121..... | 19 |
| CT3646 | 14 | CT3739 | 80 | CT3955 | 23 | CTM-26..... | 40 | GE3125..... | 19 |
| CT3647 | 14 | CT3740 | 80 | CT3956 | 23 | CTM-27..... | 40 | GE3225..... | 19 |
| CT3648 | 21 | CT3741 | 80 | CT3957 | 23 | CTM-29..... | 40 | GE3231..... | 19 |
| CT3649 | 14 | CT3742 | 81 | CT3974 | 30 | CTM-30..... | 35 | GE3421..... | 19 |
| CT3650 | 14 | CT3743 | 81 | CT3975 | 30 | CTM-30BL..... | 35 | GE3425..... | 19 |
| CT3652 | 14 | CT3744 | 81 | CT3976 | 31 | CTM-30C..... | 35 | GE4511RA..... | 18 |
| CT3653 | 14 | CT3751 | 70 | CT3977 | 85 | CTM-30TBO | 35 | | |



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