

# Photovoltaic Breakout Test Lead, MC4 Male to MC4 Female and 4 mm Sheathed Banana Plug CT4489



## Features:

- IEC 61010-031 Safety rated
- MC4 Male breakout connection (MC4 Female / 4 mm sheathed plug)
- Double insulated PVC wire
- Contact material: BeCu, AuNi plated
- CE Mark
- RoHS 2 Compliant

## Description:

The CT4489 is an MC4 male to MC4 female extension with 4 mm sheathed banana plug breakout leads. The breakout feature provides a safe and reliable method of measuring the operating voltage ( $V_{op}$ ) and operating current ( $I_{op}$ ) of solar panels. With Cal Test's new breakout leads, the user can easily insert a measurement instrument between photovoltaic modules. The double insulated PVC wire is both flexible and durable to enhance user convenience.

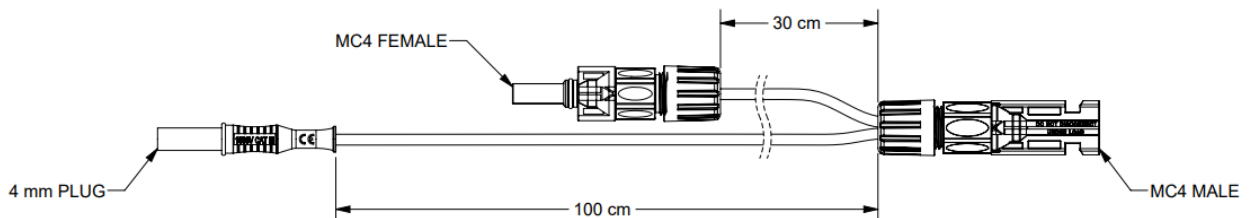
Obtain a convenient measurement solution by using the CT4489 leads along with the CT4488 leads (MC4 Jack breakout to MC4 Plug and 4 mm Plug). The CT4489 comes standard with red test lead wire, and the CT4488 comes standard with black test lead wire for easy identification.

These new leads can be used with the CT4491, MC4 extension lead, whenever additional lead length is required.

Available individually, as a pair, or in a kit. See Order Information on page 2.

For additional product information, cross-references, or other test accessory information, visit [www.caltestelectronics.com](http://www.caltestelectronics.com).

## Outline Drawing: (not to scale)



## Specifications:

- Voltage Rating: 1500 VDC CAT III
- Max Current: 36 A
- Wire: PVC Jacket 13 AWG (2.50 mm<sup>2</sup>), stranded bare copper
- Body: Polypropylene (4 mm plug), Polyphenylene Oxide (MC4)
- Contact: BeCu, Ni Plated (4 mm plug), AuNi Plated (MC4)
- Working Temperature: -20°C to +80°C

**WARNING:** Do not disconnect under load

**CAUTION:** Do not use as permanent installation

**CAUTION:** For test and measurement purposes only, MC4 female locking clip intentionally removed

## Ordering Information:

### **CT4489-L1-L2-#**

MC4 Male Breakout MC4 Female / 4 mm Sheathed Plug, Individual

"L1" Length (MC4 Female) is in cm (30 cm standard)

"L2" Length (4 mm Plug) is in cm (100 cm standard)

#Colors Available:

-2 Red

Order Example:

CT4489-30-100-2 [individual, MC4 Female (30 cm), 4 mm Plug (100 cm), red]

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### **CT4504**

Photovoltaic Test Lead Set

Includes:

CT4488-30-100-0 [MC4 Female Breakout MC4 Male (30 cm), 4 mm Sheathed Plug (100 cm), black]

CT4489-30-100-2 [MC4 Male Breakout MC4 Female (30 cm), 4 mm Sheathed Plug (100 cm), red]

### **CT4490**

Photovoltaic Test Lead Kit

Includes;

CT4486-100-0 (MC4 Female to 4 mm Plug)

CT4487-100-2 (MC4 Male to 4 mm Plug)

CT4488-30-100-0 [MC4 Female Breakout MC4 Male (30 cm) / 4 mm Plug (100 cm)]

CT4489-30-100-2 [MC4 Male Breakout MC4 Female (30 cm) / 4 mm Plug (100 cm)]

CT4491-100-2 [MC4 Male to MC4 Female]

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