

3-Range Current Probes

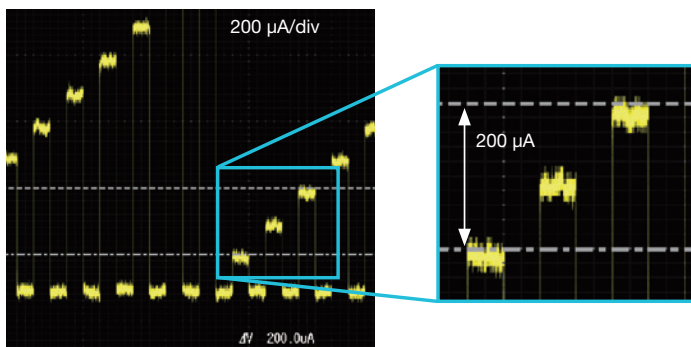
702915 (50 MHz bandwidth)

702916 (120 MHz bandwidth)

Improve productivity of circuit design with the wide, 30 A, 5 A and 0.5 A range probes for testing standby to inrush current

Micro current with high sensitivity (0.5 A range)

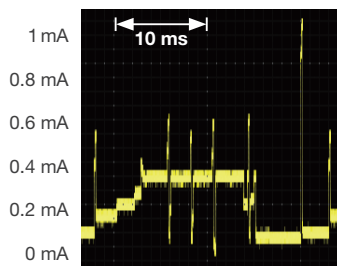
Get 10 times more sensitivity with 10 V/A than the existing 1 V/A on the 701917 probe, allowing you to see waveforms more clearly



With DLM5000

Small current

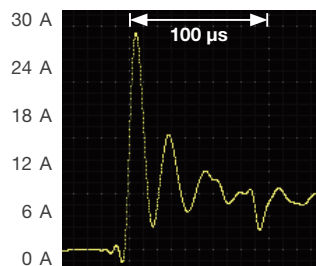
Current waveform of a power saving device



With DLM5000

Inrush current

Inrush current waveform when turning the power on



Applied instruments examples

- Digital oscilloscopes
DLM5000/DLM3000
- ScopeCorders
DL950/DL350

Major applications

- Standby current of home appliances, ECUs, industrial equipment
- Inrush current of motors and generators
- Testing of medical equipment
- Research & Development at Universities



Specifications

Items	702915	702916
Frequency band	DC to 50 MHz (-3 dB)	DC to 120 MHz (-3 dB)
Rise time	7.0 ns or less	2.9 ns or less
Delay time (Delay time relative to an input signal with a rising time of 1 ns)	30 A Range 12 ns (typical) 5 A Range 12 ns (typical) 0.5 A Range 13 ns (typical)	
Continuous Maximum input (Note frequency derating for DC and sine waves)	30 A Range 5 A Range 0.5 A Range 30 Arms 5 Arms 0.5 Arms	
Output voltage rate	30 A Range 5 A Range 0.5 A Range 0.1 V/A 1 V/A 10 V/A	
Amplitude accuracy (DC or 45 to 66 Hz sine wave, within maximum peak current for each range)	30 A Range 5 A Range 0.5 A Range $\pm 3.0\%$ reading ± 1 mV, $\pm 1.0\%$ reading ± 1 mV (10 Arms or less, typical) $\pm 3.0\%$ reading ± 1 mV, $\pm 1.0\%$ reading ± 1 mV (typical) $\pm 3.0\%$ reading ± 10 mV, $\pm 1.0\%$ reading ± 10 mV (typical)	
Maximum peak current	30 A Range 5 A Range 0.5 A Range ± 50 Apeak (Maximum 2 s input)* ± 7.5 Apeak ± 0.75 Apeak (<10 MHz), ± 0.3 Apeak (≥ 10 MHz)	
Diameter of measurable conductors	5 mm or less (Insulated conductors)	
Noise 0.5 A range, with a 20 MHz bandwidth instrument	75 μ A rms or less, 60 μ Arms (typical)	
Operating temperature and humidity range	0 to +40°C, 80% RH or less (no condensation)	
Effect of external magnetic fields DC or 60 Hz input, 400 A/m magnetic field	20 mA or less	5 mA or less
Mass	Approx. 370 g	

* Refrain from use for at least 20 seconds after maximum peak current input due to generated heat

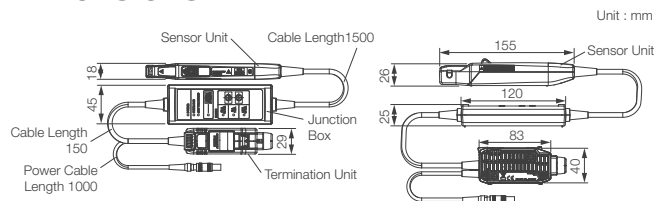
Models

Model	Product	Description
702915	Current probe	3-range current probe (50 MHz)
702916	Current probe	3-range current probe (120 MHz)

*1 For power supplying, probe power option for DL/DLM series or probe power supply are necessary. There is a spatial restriction when connecting to the ScopeCorder modules.
*2 Current probes' maximum input current may be limited by the number of probes used at a time.

For detailed information, please refer to the WP CurrentMeasInfo-01EN.

Dimensions



YOKOGAWA TEST & MEASUREMENT CORPORATION
Global Sales Dept. /E-mail: tm@cs.jp.yokogawa.com

YOKOGAWA CORPORATION OF AMERICA
YOKOGAWA EUROPE B.V.
YOKOGAWA TEST & MEASUREMENT (SHANGHAI) CO., LTD.
YOKOGAWA ELECTRIC KOREA CO., LTD.
YOKOGAWA ENGINEERING ASIA PTE. LTD.
YOKOGAWA INDIA LTD.
YOKOGAWA ELECTRIC CIS LTD.
YOKOGAWA AMERICA DO SUL LTDA.
YOKOGAWA MIDDLE EAST & AFRICA B.S.C(c)

<https://tmi.yokogawa.com/us/>
<https://tmi.yokogawa.com/eu/>
<https://tmi.yokogawa.com/cn/>
<https://tmi.yokogawa.com/kr/>
<https://tmi.yokogawa.com/sg/>
<https://tmi.yokogawa.com/in/>
<https://tmi.yokogawa.com/ru/>
<https://tmi.yokogawa.com/br/>
<https://tmi.yokogawa.com/bh/>

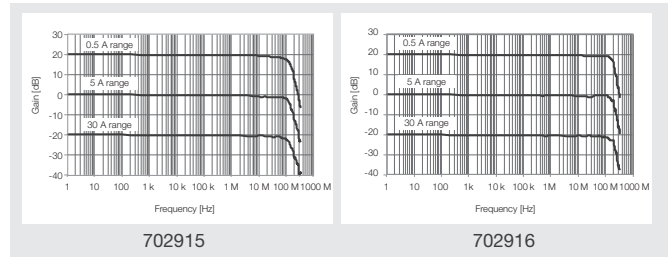


Fig.1: Typical frequency characteristic

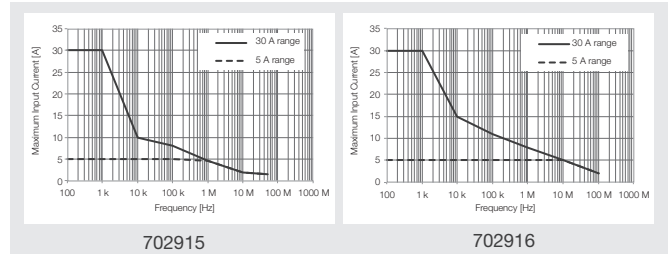


Fig.2: Typical derating by frequency

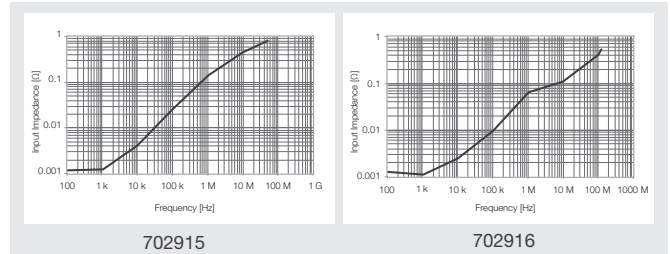


Fig.3: Typical input impedance

Related products

701934 Probe Power Supply

A power supply for current probes, FET probes, and differential probes. Probes work with both DL probe power connectors and the 701934 probe power supply. For 702915 and 702916, up to two probes can be powered when measuring maximum current. Supports both AC100 V and 200 V power supply requirements.

- Number of power supply connectors: 4
- Output voltage: ± 12 V ± 0.5 V
- Rated output current: +12 V: 2.5 A (the total value of four outputs)
-12 V: 2.5 A (the total value of four outputs)
- Operating temperature and humidity range:
0 to 40°C, 80% RH or less (no condensation)
- Rated supply voltage: AC100 to 240 V (50/60 Hz)
- Maximum rated power: 190 VA
- External dimensions: Approx. 80 (W) \times 119 (H) \times 200 (D) mm
- Weight: Approx. 1.2 kg

Notice: 701934 does not support 701928 and 701929.



NOTICE

- Before operating the product, read the user's manual thoroughly for proper and safe operation.

<https://tmi.yokogawa.com/>

YMI-N-MI-M-E03

The contents are as of March 2023. Subject to change without notice.
Copyright © 2020, Yokogawa Test & Measurement Corporation
[Ed: 02/b]