## Test&Measurement



**10:1 Passive Probe** (Wide operating temperature range)

702902 for isolated BNC

702906 for non-isolated BNC



# Best solution for accelerated testing and validation methods that include temperature cycling

#### **Features:**

#### Wider operating temperature range

The operating temperature range of conventional passive probes is similar to that of the measurement instrument used (5 to 40°C). The 702902 and 702906 passive probes however have been designed to be used under a much wider operating temperature range (-40 to +85°C). These probes are therefore ideal for use in accelerated testing and validation methods where temperature cycling is part of the test procedure.



702902 (for isolated BNC)

#### Superior solidity and durability

To withstand the usage under severe environmental conditions, these probes have been tested to withstand a cable mount pulling force of 60 N and have been tested over 500 temperature cycles (Sample test under our company standard).

#### Long 2.5-meter probe length

The probes are equipped with longer cables and as such the total length including the cable is 2.5 meter. This way it is easier to keep the measuring instrument away from the high temperature measurement point. Longer probe lengths are also required to connect a measuring instrument to a temperature controlled chamber.



702906 (for non-isolated BNC)

#### Support for isolated and non-isolated inputs

The 702902 can be used in combination with the isolated input modules of the ScopeCorder series, whereas the 702906 has been designed to be used with the non-isolated inputs of the Yokogawa DLM4000 and DLM2000 Oscilloscopes.

#### Probe tip conversion adapters (Sold separately)

A range of probe tip conversion adapters is available to connect the probe to the application in the most convenient way such as: safety mini clips, fork terminal adapters and small or large alligator clips. Also 4 mm conversion adapters with pincher tip/safety banana connectors are available.









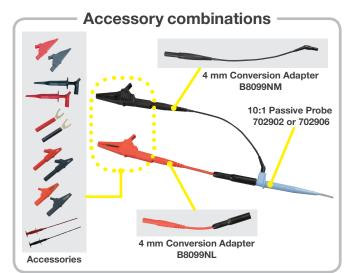


**Precision Making** LF 702902-01EN

### **Application**

- Accelerated testing and validation of automotive parts and designs inside a temperature chamber.
- Environmental testing of power converters designed for outside installation such as inverters and transformers used for solar photo voltaic and wind turbine power generation.
- Evaluation and environmental testing of sensors and actuators used in automotive, railway, aerospace and marine applications.
- Testing of home appliances such as air-conditioners, cookers and refrigerators.





#### 701919 Probe Stand

A probe stand with a flexible arm and heavy base allows designers to guide probes onto the small geometries of fine-pitch interconnects, SMD packages MCMs (multi-chip-modules), hybrids and ICs.



#### **Specifications**

Оробинова			
Item	702902	702906	
Supported Model	Isolated input module for ScopeCoder series	DLM2000 series, DLM4000 series	
Frequency Band	DC to 60 MHz (-3 dB)	DC to 200 MHz (-3 dB)	
Connector type	Isolated BNC	BNC	
Input resistance/ capacitance*1	10 MΩ±2%/17.0 pF*2	10 MΩ±2%/16.0 pF*2	
Maximum input voltage	±1000 V (DC+ACpeak) CAT II Between the pincher tip and safety ground lead ±1000 V (DC+ACpeak) CAT II Between safety ground lead and ground	±1000 V (DC+ACpeak) CAT II Between the pincher tip and ground	
Operating temperature range	-40 to +85°C		
Operating humidity range	< 80% (at 40°C) (No condensation)		
Probe Length	2.5 m		
Attenuation ratio*1	10:1 (Fix) ±2% (5 to 40°C) ±3% (-40 to 5°C, 40 to 85°C)		
Standard Parts	Pincher tip, Ground lead, Marker tip, User's manual (702906 only) Adjustment screwdriver		

<sup>\*1:</sup> In conjunction with a measuring instrument with an input impedance of 1 M $\Omega\pm1\%$ .

#### **Probe models**

Name	Model
10:1 Passive Probe (Wide temperature operating range, for isolated BNC)	702902
10:1 Passive Probe (Wide temperature operating range, for non-isolated BNC)	702906

<sup>\*</sup>Due to the nature and usage of this product, no warranty period is provided.

#### Accessories (-40 to +85°C)

70000	00+010+0100	0)	
Model	Name	Description	
B8099NL	4 mm Conversion Adapter (Pincher tip end)	1000 V (DC+ACpeak) CAT II	_
B8099NM	4 mm Conversion Adapter (Ground lead end)	1000 V (DC+ACpeak) CAT II	
701954	Alligator Clip (Dolphin type)	1000 Vrms-CAT III, 1 set each of red and black	4
758928 🐴	Pincher tip	1000 Vrms-CAT III, 1 set each of red and black	
758921 🐴	Fork Terminal Adapter	1000 Vrms-CAT II, 1 set each of red and black	>
758922 🐴	Small Alligator-Clip Adapter	300 Vrms-CAT II, 1 set each of red and black	4
758929 🐴	Large Alligator-Clip Adapter	1000 Vrms-CAT II, 1 set each of red and black	<b>‡</b>
701906* 🐴	Long Test Clip	1000 Vrms-CAT II, 1 set each of red and black	
A			

⚠ Due to the nature of this product, it is possible touch its metal parts. Therefore, there is a risk of electric shock, so the product must be used with caution. \*The operating temperature range of the 701906 is -40 to  $+65^{\circ}\text{C}$ 



YOKOGAWA TEST & MEASUREMENT CORPORATION

Global Sales Dept. /E-mail: tm@cs.jp.yokogawa.com

YOKOGAWA MIDDLE EAST & AFRICA B.S.C(c)

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.

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/

https://tmi.yokogawa.com/

The contents are as of May 2023. Subject to change without notice. Copyright © 2014, Yokogawa Test & Measurement Corporation