

MODEL 83 HIGH PERFORMANCE TRIAXIAL PROBE HOLDER

Specifications

Introduction

The Model 83 triaxial probe holder provides extremely low current, low noise performance plus low capacitance and variation. The mechanical design of the Model 83 probe holder actually helps stabilize the probe and removes residual vibration which can influence low current measurements.

The Model 83 triaxial probe system was designed for low current-low noise and low capacitance testing. The REPLACEABLE signal probe tip is guarded to within 3/32" (2.4mm) of the point. The system consists of 3 parts: Holder, Tip, and Cable. The replaceable tip incorporates a proprietary plug and receptacle system that securely maintains both a robust electrical/electronic connection as well as the probe tip position without the use of a set screw.

Performance

The Model 83 probe system provides an extremely well guarded and shielded probe with only the minimum tip exposure needed for the actual probe tip. Attoamp current levels can be measured with this fully guarded system. The model 83 enhances the performance of the probing station by shielding and thus minimizing the effects of the much larger surface area chuck.

The Model 83 probe almost completely eliminates capacitance variations seen by the probe as the station chuck is moved. Because of its guarded and shielded configuration, the probe "sees" only the area of the chuck directly beneath the probe so the capacitance seen at the chuck edge is the same as that seen in the center.

Features

The model 83 system combines a robust yet fluid body design with a Micromanipulator proprietary integrated triaxial connector and high performance, replaceable coaxial probe tip. The body actually becomes a semi-rigid cable that helps stabilize the probe tip and removes residual vibration. The coaxial tip is pre-bent to a standard 70° configuration but may also be bent by the user for a custom application.

Configurations

1. Holder:

Model 83-8000-T-02

configured for Model 4000 / 8000 / 9000 test stations

2. Tip:

The model 83 disposable tips are malleable and can be easily bent into any number of shapes. For best contact performance, the standard bend angle 70° is recommended. Standard tips available are:

- 83-70A: 70° attack angle, 0.007" (0.18mm) tip diameter, 0.35 μm point radius
- 83-70B: 70° attack angle, 0.007" (0.18mm) tip diameter, 0.50 μm point radius
- 83-70X: 70° attack angle, 0.007" (0.18mm) tip diameter, 0.25 μm point radius

3. Cables:

Available in 2 standard lengths: 14 (35cm) and 30-inches (76cm) long.

- 82-TCAB-14; 14" (35cm) long cable
- 82-TCAB-30; 30" (76cm) long cable

Custom lengths available upon request.

Model 83 probe



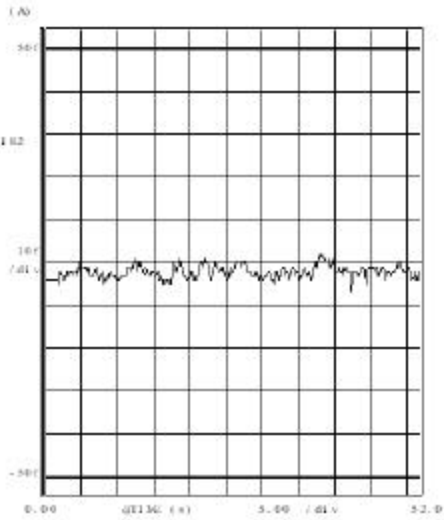
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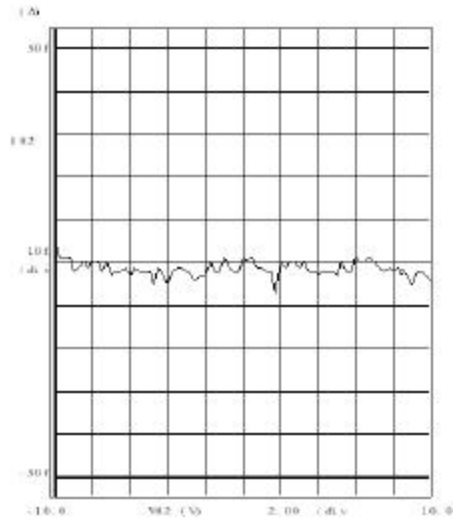
Specifications subject to change without notice.

Specifications

**10 Volt sampling time sweep
10 fA per division**



**+/- 10 volt sweep
10 fA per division**



Capacitance variation across 200mm thermal chuck

