

# HIOKI

## 9677

### SMD TEST FIXTURE

#### Instruction Manual

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9677A980-01 02-10H

#### Introduction

Thank you for purchasing the HIOKI "9677 SMD TEST FIXTURE." To obtain maximum performance from the product, please read this manual first, and keep it handy for future reference.

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## Specifications

|  |   |
|--|---|
| Measurement frequency range              | DC to 120 MHz   |
| Maximum apply voltage                    | ±40 VDC   |
| Width of sample to be tested             | 3.5±0.5 mm max.   |
| Residual resistance                      |   |
| Short-circuited                          | 200 mΩ max. (at 100 Hz)   |
| Floating capacitance between terminals   | 2 pF max. (at 5 MHz)  |
| Dimensions and Mass                      | Approx. 103W x 48H x 37D mm (4.06"W x 1.89"H x 1.46"D) (excluding protrusions)<br>Approx. 135 g (4.8 oz.) |
| Operating temperature and humidity range | 0 to 40°C (32 to 104°F), 80%RH or less (with no condensation)   |
| Storage temperature and humidity range   | -10°C to 55°C (14 to 131°F), 80%RH or less (with no condensation)   |
| Operating environment                    | Indoors, altitude up to 2000 m (6562-ft.)   |
| Other                                    | CE-mark certified (except when connected to the 3535).  |

Please check a HIOKI catalog for instruments to which this product can be connected.

## Overview

This HIOKI 9677 SMD TEST FIXTURE can be directly connected to the measurement terminals (UNKNOWN) of the HIOKI LCR and Z HITESTERS for testing a SMD component. The component can be clamped with a single knob action.

## Inspection and Maintenance

### Initial Inspection

When you receive the product, inspect it carefully to ensure that no damage occurred during shipping. If damage is evident, or if it fails to operate according to the specifications, contact your dealer or HIOKI representative.

### Preliminary Checks

- Before using the product the first time, verify that it operates normally to ensure that the no damage occurred during storage or shipping. If you find any damage, contact your dealer or Hioki representative.

### Maintenance and Service

- To clean the product, wipe it gently with a soft cloth moistened with water or mild detergent. Never use solvents such as benzene, alcohol, acetone, ether, ketones, thinners or gasoline, as they can deform and discolor the case.
- If the product seems to be malfunctioning, contact your dealer or Hioki representative. Pack the product carefully so that it will not be damaged during shipment, and include a detailed written description of the problem. Hioki cannot be responsible for damage that occurs during shipment.

## Safety

Follow these precautions to ensure safe operation and to obtain the full benefits of the various functions.

### ⚠ WARNING

Mishandling during use could result in injury or death, as well as damage to the product. Be certain that you understand the instructions and precautions in the manual before use. We disclaim any responsibility for accidents or injuries not resulting directly from product defects.

### Safety Symbol



In the manual, the ⚠ symbol indicates particularly important information that the user should read before using the product.

The following symbols in this manual indicate the relative importance of cautions and warnings.

**⚠ WARNING** Indicates that incorrect operation presents a significant hazard that could result in serious injury or death to the user.

**⚠ CAUTION** Indicates that incorrect operation presents a possibility of injury to the user or damage to the product.

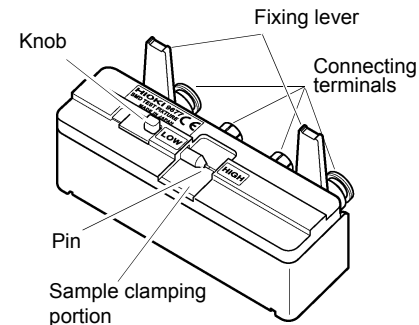
**NOTE** Advisory items related to performance or correct operation of the product.

## Usage Notes

### ⚠ CAUTION

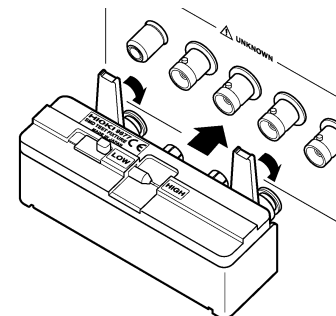
- Do not store or use the product where it could be exposed to direct sunlight, high temperature or humidity, or condensation. Under such conditions, the product may be damaged and insulation may deteriorate so that it no longer meets specifications.
- Do not use the product where it may be exposed to corrosive or combustible gases. The product may be damaged.
- To avoid damage to the product, protect it from vibration or shock during transport and handling, and be especially careful to avoid dropping.
- This product is not designed to be entirely water- or dust-proof. To avoid damage, do not use it in a wet or dusty environment.
- If the fixture has gotten seriously wet, oily, or dusty, stop using it and send it for service at an approved HIOKI service facility.
- Please refer to the instruction manual for the instrument to which this product is connected for how to use the instrument and apply direct current voltage.

## Parts Names

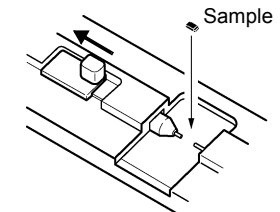


## Connecting the Test Fixture

Plug the fixture into the measurement terminals (UNKNOWN) of the tester, with the product name up. Fasten it in place with the left and right fixing levers.



## Fixing the Samples



Place the sample in the sample clamping portion and fasten it by adjusting the knob.

### NOTE

- Samples you can clamp must be smaller than 3.5±0.5mm.
- Be careful to keep dirt away from the clamping portion.

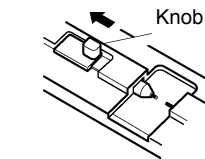
## Open and Short Circuit Compensation

To enhance the accuracy of measurement, perform the open and short circuit compensation.

### NOTE

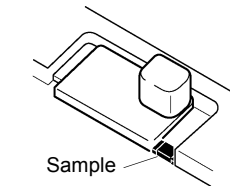
Procedures for connecting and using this product vary according to the instrument with which it is used. Refer to the instruction manual for the specific instrument.

### Open circuit compensation



Move the knob to separate the HIGH and LOW electrodes.

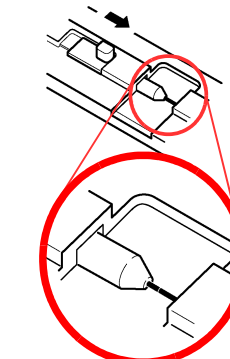
The space between the electrodes must equal the sample width.



When the sample is 1 mm or more:

To fix pin separation, the sample can be clamped with the knob as shown in the figure at left.

### Short circuit compensation



Close the HIGH-LOW electrodes.