

9699

SMD TEST FIXTURE

Instruction Manual

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HIOKI

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Warranty

Warranty malfunctions occurring under conditions of normal use in conformity with the Instruction Manual and Product Precautionary Markings will be repaired free of charge. This warranty is valid for a period of three (3) years from the date of purchase. Please contact the distributor from which you purchased the product for further information on warranty provisions.

Introduction

Thank you for purchasing the HIOKI 9699 SMD TEST FIXTURE. To obtain maximum performance from the product, please read this manual first, and keep it handy for future reference.

Overview

This HIOKI 9699 SMD TEST FIXTURE can be directly connected to the measurement terminals (UNKNOWN) of the HIOKI LCR HiTESTERS for testing a SMD component.

Specifications

Measurement frequency range	DC to 120 MHz
Maximum apply voltage	±40 VDC
Dimensions of sample to be tested	Width: 1 mm to 4 mm (0.04" to 0.16") Height: 1.5 mm (0.06") or less
Residual resistance	
Short-circuited	100 mΩ max. (at 100 Hz)
Floating capacitance between terminals	2 pF max. (at 1 MHz)
Dimensions and Mass	Approx. 100.5W x 28.6H x 40D mm (3.96"W x 1.13"H x 1.57"D) (excluding protrusions), Approx. 125 g (4.4 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.)
Accessories	Instruction Manual, short bar
Product warranty period	3 years

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

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

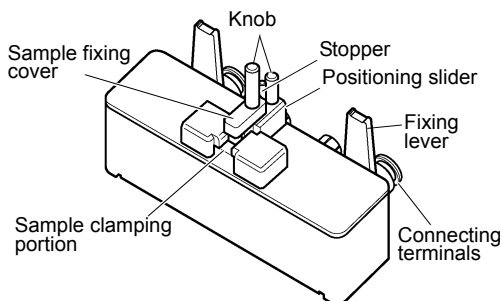
Advisory items related to performance or correct operation of the product.

Usage Notes

⚠ CAUTION

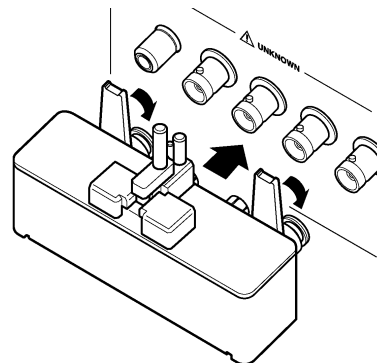
- Do not store or use the product where it could be exposed to direct sunlight, high temperature or humidity, or condensation. Under such conditions, the product may be damaged and insulation may deteriorate so that it no longer meets specifications.
- Do not use the product where it may be exposed to corrosive or combustible gases. The product may be damaged.
- 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.
- To avoid damage to the product, protect it from vibration or shock during transport and handling, and be especially careful to avoid dropping.
- 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

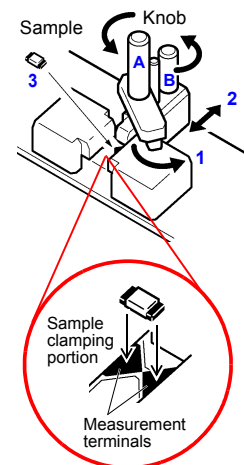


Connecting the Test Fixture

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



1. Rotate knob A to loosen it, and then open the sample fixing cover.
2. Adjust the depth of the sample clamping portion, if necessary. (Adjusting Procedure) Loosen knob B and move the slider forward or backward into position. Tighten knob B to fix the slider.
3. Place a sample in the center of the sample clamping portion.
4. Replace the sample fixing cover. Rotate knob A to fix the sample.

Make sure that the terminals on both sides of the sample are placed on both measurement terminals of the clamping portion. Do not place the sample in contact with any other metal portions of the test fixture.

NOTE

- Samples you can clamp must be 1 to 4 mm in width and 1.5 mm in height.
- 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

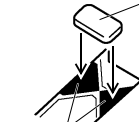
Procedures for connecting and using this product vary according to the instrument with which it is used. Refer to the instruction manual for the specific instrument.

Open circuit compensation

Remove the sample from the sample clamping portion to open the high and low terminal circuits.

Short circuit compensation

Sample clamping portion



Short bar
Clamp the short bar (supplied with the 9699 model) in place of a sample to close the high and low terminal circuits.

Measurement terminals

Make sure that the short bar is placed on both measurement terminals of the clamping portion. Do not place the short bar in contact with any other metal portions of the test fixture.