



1109 IMPEDANCE BOARD HiTESTER

Automatic Testing
Equipment



Tests multi-sample boards
with up to 3000 blocks and printed circuit boards

TDR method impedance testing of high-speed, high-frequency boards

From IC packages to MCMs

The 1109 IMPEDANCE BOARD HiTESTER is a bare board tester employing a test head (inspection jig) equipped with dedicated high-frequency probes for TDR measurement. In addition to features for inspection of MCM, BGA, FC-PGA, FC-BGA, CSP, and memory boards, the equipment is also capable of testing large multi-sample boards.



ISO14001
JQA-E-90091



<http://www.hioki.co.jp/>

HIOKI company overview, new products, environmental considerations and other information are available on our website.

■ Specifications

[Mechanism part]

■ XY axis unit

Test board dimensions : 10 × 10mm to 510 × 610 mm
(Accommodates both a piece and a multi-sample panel)

Work area : 10 × 10 mm to 500 × 600 mm
(Accommodates both a piece and a multi-sample panel)

Board thickness : 0.3 mm to 3.2 mm

Board fixation : Vacuum jig

Travel resolution : 1.25 μm

Position repetition : Within ±10 μm

Loading height : 930 mm ±10 mm

■ Upper Theta axis unit

Travel resolution : ±2 sec.
Position repetition : Within ±3 sec.

■ Upper Z axis units

Travel stroke : 5 mm (automatic inspection mode)
Position repetition : ±15 μm

[TDR measurement part]

Measuring instrument : TEKTRONIX CORP.
(standard) TDS8000 with 80E04 and module extenders
Bandwidth : 20GHz
(Please inquire regarding other measuring instruments.)

Test head : Test head with built-in high-frequency

Probes used : High-frequency probe (individually movable)
Bandwidth: 20 to 40GHz (probe only)

Cables used : High-frequency cable
Bandwidth: Equivalent to 18GHz

Calibration : Built-in calibration board

No. of test steps : Max. 20,000 steps

Test pieces : Max. 3000 pieces

[General specifications]

Power supply : AC 200 V ±10% (single phase) 50/60 Hz
Power consumption: 4 kVA

Pneumatic system : Primary pressure: 0.6 to 0.99 MPa (dry air)
Setting pressure (secondary side): 0.5 ±0.1 MPa

Operating environment : Operating temperature and humidity:
23°C ±3°C, 60% rh max. (no condensation)

: Storage temperature and humidity:
10°C to 43°C, 80% rh max. (no condensation)
(same as for using the test heads)

: Atmosphere: Avoid use in an atmosphere where
dust, vibrations or corrosive gases may occur.

: Floor strength: 500 kg/m² or higher

Insulation resistance : 100 MΩ or higher
(DC 500 V between power supply and cabinet)

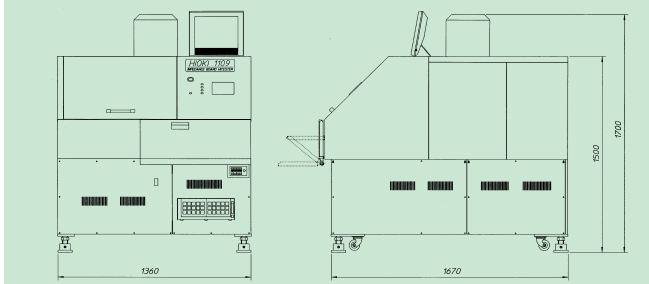
Withstand voltage : AC 2.2 kV RMS

Accessories : PC accessories (such as a keyboard), 40-character width thermal printer, printer cable, printer buffer, leveling jacks, and maintenance tool set

Main unit dimensions : Approx. 1360 (W) × 1780 (H) × 1670(D) mm
(excluding protruding parts)

Mass : Approx. 1200 kg

External dimensions



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