

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)

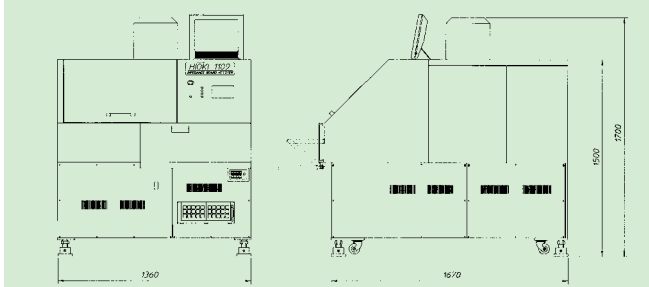
Cables used : High-frequency cable
Bandwidth: Equivalent to 18GHz
Calibration : Built-in calibration board
No. of test steps : Max. 20,000 steps
Test pieces : Max. 3000 pieces

[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



1109 IMPEDANCE BOARD HiTESTER

HIOKI

HIOKI E. E. CORPORATION

HEAD OFFICE :
81 Koizumi, Ueda, Nagano, 386-1192, Japan
TEL +81-268-28-0562 / FAX +81-268-28-0568
E-mail: os-com@hioki.co.jp

HIOKI USA CORPORATION :
6 Corporate Drive, Cranbury, NJ 08512 USA
TEL +1-609-409-9109 / FAX +1-609-409-9108
E-mail: hioki@hiokiusa.com

TKK HIOKI CO.,LTD :
NO.66-8,Sec.2,Nan Kan Road,Lu-chu,
Taoyuan,Taiwan,R.O.C.
TEL +886-3-311-7260 / FAX +886-3-311-8236

HIOKI E.E.CORPORATION Singapore Representative Office :
12 New Industrial Road,#02-04 Thoren Technocentre,Singapore 536202
TEL +65-288-0050 / FAX +65-282-2283
E-mail: kensoh@hioki.per.sg

DISTRIBUTED BY