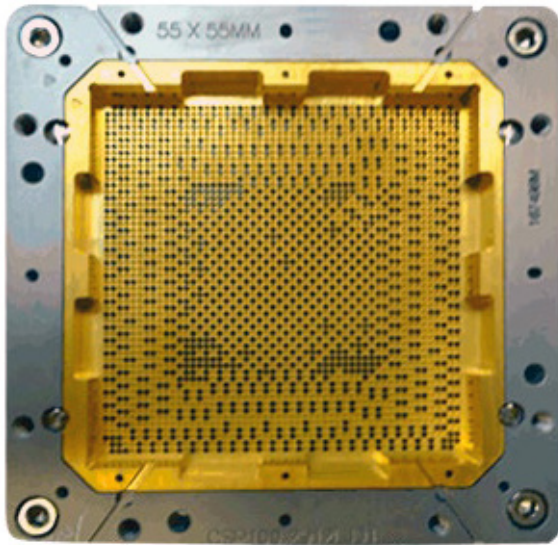


ICON Coaxial Contactor

Production Solution for Testing High End Digital Applications to 60 Gbps



Automotive / Power



Mobility



Precision Analog / Sensors



High End Digital



RF

Benefits

- Long life and lower cost of test
- Consistent electrical performance
- Suitable for BGA / LGA pitches down to 0.8 mm
- Suitable for GPU, SerDes, DDR, PAM₄, HDMI, PCIE and SAW applications

Key Features

- High isolation full ground shielding from board to DUT
- Exceptional DC and RF performance
- High frequency
- Excellent thermal management

- Temperature Range: -55°C to +155°C
- Matched impedance provides the highest bandwidth - less loss through the system

- Metal body reduces cross talk
- Impedance is not affected by proximity of device grounds

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Specifications

Packages and Applications

- Packages
 - BGA, LGA
 - Singulated devices or strip test
 - 0.8 mm or 1.0 mm pitch

Environmental

- Temperature Range: -55°C to +155°C

Reliability*

- Typical Probe Life: 250k cycles

Electrical

- Bandwidth @ -1 dB Insertion Loss
 - 0.8 mm pitch: 52 GHz
 - 1.0 mm pitch: 38 GHz
- Return Loss GSG
 - 0.8 mm pitch: -10 dB @ 51 GHz
 - 1.0 mm pitch: -50 dB @ > 35 GHz
- Isolation
 - 0.8 mm pitch: -60 dB @ > 40 GHz
 - 1.0 mm pitch: -50 dB @ > 40 GHz
- Contact Resistance**
 - < 125 mΩ
- Impedance
 - 50 Ω
- Maximum Current @ 1% Duty Cycle
 - 0.8 mm pitch: 2.4 A
 - 1.0 mm pitch: 1.7 A

Mechanical

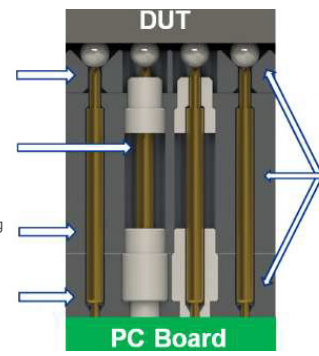
- DUT Side Compliance
 - 0.8 mm pitch: 250 mm
 - 1.0 mm pitch: 330 mm
- Contact Length at Test Height
 - 0.8 mm pitch: 2.74 mm
 - 1.0 mm pitch: 5.1 mm
- Contact Spring Force at Test Height
 - 0.8 mm pitch: 0.25 N
 - 1.0 mm pitch: 0.3 N
- DUT Tip Style
 - L (Four-point crown)
- PCB Tip Style
 - 0.8 mm pitch: full radius
 - 1.0 mm pitch: four-point crown

Materials

- Housing Material
 - Gold-plated aluminum
- Spring Material
 - Stainless steel
- Plating Material
 - Hard gold

Configurations / Interface Options

- Automated Test
 - Handler specific design / configuration
 - Singulated package
 - Optional manual actuator

- Aluminum floating alignment plate provides excellent alignment and ground for complete isolation up to the DUT
 - Air dielectric on signal probes provides less loss
 - Aluminum body provides exceptional thermal properties and rigidity along with great signal isolation
 - Aluminum retainer plate holds the probes in the body and provides complete isolation to the test interface board
- 
- All aluminum, full-length signal shielding
 - Isolation from the DUT to Test System
 - Aluminum body has the stiffness to avoid bowing in when used with large parts

* Cleaning frequency and life specifications are estimates based on customer feedback. Actual values are dependent on the application (DUT materials, handler kit, maintenance, etc.)

** Typical resistance measured between Au plated sheets

All specifications are subject to change without notification and are for reference only. Use contactor drawing to design interface hardware. For detailed performance specifications, please contact Cohu.