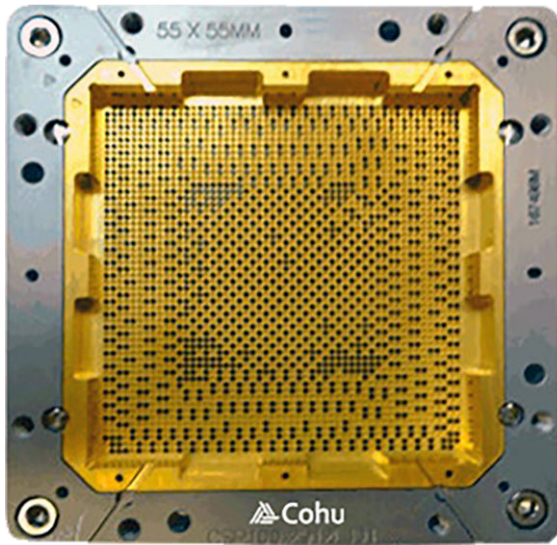


ICON Coaxial Contactor

Production Solution for Testing RF and High End Digital Applications



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 0.4 mm
- Suitable for GPU, SerDes, DDR, PAM₄, HDMI, PCIE, SAW, 5G mmWave, UWB and Satellite 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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Production Solution for Testing RF and High End Digital Applications

Specifications

Packages and Applications

- Packages
 - BGA, LGA
 - Singulated devices or strip test
 - 0.4 mm, 0.5 mm, 0.8 mm or 1.0 mm pitch

Environmental

- Temperature Range: -55°C to +155°C

Reliability*

- Typical Probe Life: 300k cycles

Electrical

- Bandwidth @ -1 dB Insertion Loss GSG
 - 0.4 mm pitch: 60 GHz
 - 0.5 mm pitch: 60 GHz
 - 0.8 mm pitch: 52 GHz
 - 1.0 mm pitch: 38 GHz
- Bandwidth @ -1 dB Return Loss GSG
 - 0.4 mm pitch: 65 GHz
 - 0.5 mm pitch: 63 GHz
 - 0.8 mm pitch: 51 GHz
 - 1.0 mm pitch: 35 GHz
- Isolation
 - 60 dB typical
- Contact Resistance**
 - < 125 mΩ
- Standard Impedance
 - 50 Ω
- Custom Impedances
 - 25 Ω, 30 Ω, 35 Ω, 42 Ω
 - Other custom impedances available
- Custom Differential Impedances
 - 50 Ω, 85 Ω
- Maximum Current @ 1% Duty Cycle
 - Varies by pitch: refer to Hydra probe specifications for more details

Mechanical

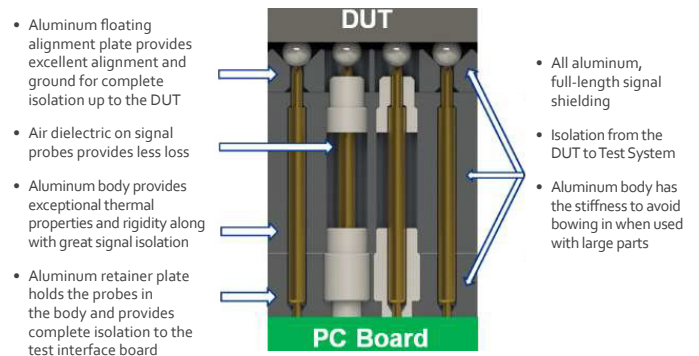
- Some mechanical parameters vary by pitch; refer to Hydra probe specifications for more details:
 - 0.4 mm pitch: HYD020
 - 0.5 mm pitch: HYD025
 - 0.8 mm pitch: HYD040
 - 1.0 mm pitch: HYD050
- Contact Length at Test Height
 - 3.22 mm typical
- DUT Side Compliance
 - >250 μm typical
- DUT Tip Style
 - L (Four-point crown) or B (pointed)
- PCB Tip Style
 - Full radius typical

Materials

- Housing Material
 - Aluminum

Configurations / Interface Options

- Automated Test
 - Handler specific design / configuration
 - Singulated package
 - Optional manual actuator
 - Probe head for WLCSP



* 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.