

Cost Efficient RF Contactor for Fine Pitch FBGA and Wafer-Level Packages

Features:

- revolutionary barrel-less architecture
- HyperCore - homogeneous DUT side plunger material
- exceptional DC and RF performance
- high-precision manufacturing process
- large contact surface between top and bottom plungers
- high frequency > 40 GHz @ -1 dB
- singulated
- BGA, LGA, QFN
- pitches down to 0.40 mm

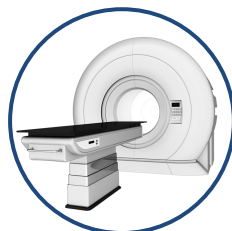


Benefits:

- compatible with all device types, plating, and pitches
- long life and lower cost of test
- consistent electrical performance



RF / Analog



Digital



Power / Sensor



Wafer Level Test



Cost Efficient RF Contactor for Fine Pitch FBGA and Wafer-Level Packages

1. Packages and Application

- 1.1 Packages
- BGA, LGA, QFN
 - singulated devices
 - pitch down to 0.4 mm

2. Environmental

- 2.1 Temperature Range
- -55° C +155° C

3. Reliability*

- 3.1 Typical Probe Life
- 500 k cycles

4. Electrical

- 4.1 Bandwidth @ -1 dB Insertion Loss
- 0.4 mm pitch: 40 GHz, GSG
- 4.2 Loop Inductance
- 0.4 mm pitch: 0.56 nH, GSG
- 4.3 Maximum Continuous Current
- 1.9 A
- 4.4 Maximum Peak Current
- 15.5 A
- 4.5 Typical Contact Resistance**
- 60 mΩ
- 4.6 Total Shunt Capacitance
- 0.06 pF, GSG

specifications are subject to change without notification and are for reference only. use contactor drawing to design interface hardware.

*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

5. Mechanical

- 5.1 Compliance
- 0.26 mm DUT-side
 - 0.36 mm total
- 5.2 Contact Length at Test Height
- 1.51 mm
- 5.3 Contact Spring Force at Test Height
- 0.18 N
- 5.4 DUT Tip Style
- single for QFNs, dual for BGAs
- 5.5 PCB Tip Style
- 0.3 mm radius

6. Materials

- 6.1 Housing Material
- Vespel SP-1 (others available on request)
- 6.2 Contact Spring Material
- stainless steel
- 6.3 Probe Material
- HyperCore, proprietary hard metal: 600 Knoop hardness
- 6.4 Contact Spring Coating
- hard gold

7. Configurations / Interface Options

- 7.1 Automated Test
- handler specific design/configuration
 - singulated package
- 7.2 Manual Test
- manual actuators available

All performance figures such as MTBF, MTBA, Uptime, Yield, Jam Rate, Life Span, Cleaning Cycles etc. can vary with specific package type, test program and / or specific application environment. They assume that only original Multitest spare and consumable parts are used, recommended maintenance intervals and procedures are respected, operators/maintenance technicians have successfully participated in formal equipment training by Multitest to the appropriate level, and only Multitest approved software is used on the systems. Multitest assumes no warranty or liability if any of these requirements is not met. All listed data are for information only. For binding specification please contact your sales person.

