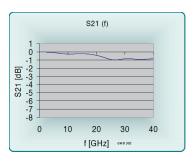


Long-Life Hi-Frequency Sockets for BGA, LGA, QFN, MLCC, µBGA and Bumped Die Devices

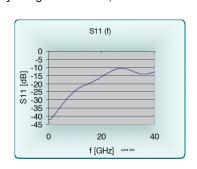
Ideally Suited for RFIC and Microwave IC Development & Test Interposer Contact System – AR200 and AR300 Series Test Sockets

Announcing significant improvements to our high-performance contact system. Using our proven Interposer Elastomer Technology, the new CORE feature internally controls compression to ensure stability with extremely low resistance values and much longer contact element life. (See Interposer Contact System Life on following page).

Low interconnect parasitics make these sockets an ideal choice for device characterization or high-volume production testing of devices, such as power amplifiers, mixers, highly integrated RF ICs, and microwave devices.



Insertion Loss of -1dB @ 40GHz

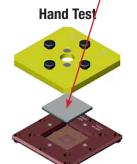


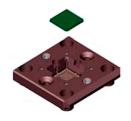
Return Loss of -15dB @ 22GHz

Interposer contact system with very short interconnects (available in 1.0mm or 0.6mm thickness) enhance adjacent channel power and noise sensitivity

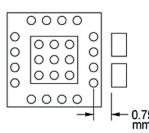
measurements. FULL-ARRAY SHOWN AS AN EXAMPLE; YOUR SPECIFIC DEVICE PATTERN/FOOTPRINT WILL BE SUPPLIED WHEN ORDERED.

Automation





QFN Footprint



Interposer footprint lets the PCB designer locate impedance matching network components within 1mm of device pads.

ORDERING INFORMATION

This material can be ordered with **ANY Aries RF/CSP Sockets**

Shield

(Optional for BGA's)

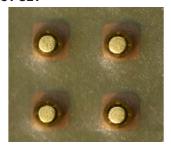
Contact Set

Interposer

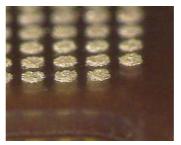
INTERPOSER



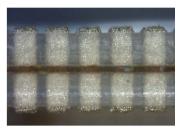
Top Side Tips Pierce DUT



Bottom Side



Column Array Tails Compress Columns Elastomer Matrix Compliant Buttons



Cross Section An Particles

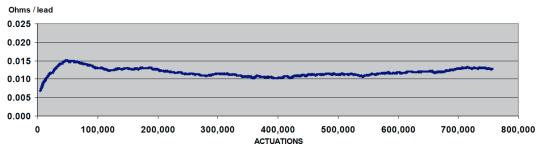


Bristol, PA 19007-6810 USA TEL (215) 781-9956 • FAX (215) 781-9845 WWW.ARIESELEC.COM • INFO@ARIESELEC.COM



Long-Life Hi-Frequency Sockets for BGA, LGA, QFN, MLCC, µBGA and Bumped Die Devices

High-Performance Interposer Contact Technology Suitable for Manual & Automated High-Volume Production Test



Interposer Contact System Life: QFN 0.5mm Pitch, 1.0mm Full Height

AR200 Series: 1.0mm Full Height Specifications

(measured in a 0.5mm pitch environment, GSG) Insertion Loss S21: -1dB @ 40GHz Return Loss S11 thru: -15dB @ 22GHz

Self Inductance: 0.33nH **Mutual Capacitance**: <0.05pF

Operating Temperature: -55°C to 155°C

Contact Resistance: $<25m\Omega$

Current Rating: 4A per lead with a 14°C rise **Contact Length** (compressed): 1.04mm **Contact Force/Travel**: 25-45 gf/0.4mm travel **Contact Set Life**: >2,000,000 insertions

Interposer Elastomer Life: >500,000 insertions

AR300 Series: 0.6mm Half Height Specifications

(estimated 0.5mm pitch environment, GSG) Insertion Loss S21: -1dB @ >40GHz Return Loss S11 thru: -15dB @ >22GHz

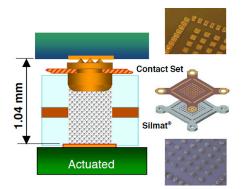
Self Inductance: <0.15nH **Mutual Capacitance**: <0.02pF

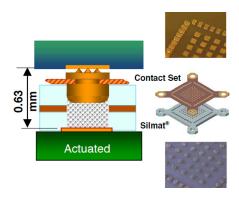
Operating Temperature: -55°C to 155°C

Contact Resistance: $<25m\Omega$

Current Rating: 4A per lead with a 14°C rise Contact Length (compressed): 0.63mm Contact Force/Travel: 25-45 gf/0.28mm travel Contact Set Life: >2,000,000 insertions

Interposer Elastomer Life: >500,000 insertions





Interposer Elastomer Conductive Columns, available in 2 Standard Heights with Standard & Custom Pitches from 1.27mm to 0.4mm

