

FEATURES

- Aries unique universal socketing system allows the socket to be easily configured for any package, on any pitch (or multiple pitch) from 0.2mm or greater, in any configuration, with little or no tooling charge or extra lead-time.
- For Test & Burn-In of CSP, μBGA, Bump-Array, QFN, QFP, MLF, DFN, SSOP, TSSOP, TSOP, SOP, SOIC, LGA, LCC, PLCC, TO and any SMT package style made. Also can be compatible with PGA packaged devices.
- Quick and easy <u>Probe Replacement System</u>: the complete set of probes can be removed and a new set (interposer) can be inserted quickly and easily. The old set can be returned to the factory for repair and sent back within one day.
- Low resistance testing using dual independent Aries Kelvin spring-probe technology per device pad for testing of MLF, QFN, LGA and other leadless devices.
- Socket is easily mounted and removed to & from the test board due to solderless pressure mount compression Spring-Probes which, are accurately located by two molded plastic alignment pins and mounted with four stainless steel screws.
- The Au over Ni-plated compression Spring-Probes leave very small witness marks on the bottom surface of the device pads.
- Small overall socket size/profile allows max. number of sockets per test board, while being operator-friendly.
- Kelvin Test Socket Contact System is available for any Aries CSP and Center Probe Test Sockets.
- Pressure pad compression spring provides proper force against device and allows for height variations in device thickness.
- Probe blade edge tip for cutting through solder oxide layers.
- Signal path during test only 0.082 [2.08].

GENERAL SPECIFICATIONS

- MOLDED SOCKET COMPONENTS: UL 94V-0 Ultem
- MACHINED SOCKET COMPONENTS: UL 94V-0 PEEK or Torlon
- ALL HARDWARE: Stainless Steel
- COMPRESSION SPRING PROBE: heat-treated BeCu
- COMPRESSION SPRING PROBE PLATING: 50μ [1.27 μ] min. Au per MIL-G-45204 over 50μ [1.27 μ] min. Ni per SAE AMS-QQ-N-290
- DURABILITY: 500,000 cycles min.
- CONTACT FORCE : 16g/contact on 0.40-0.45mm pitch
- OPERATING TEMPERATURE: -55°C [-67°] min. to 150°C [302°] max.

MOUNTING CONSIDERATIONS

- See "PCB FOOTPRINT TOP VIEW" for requirements
- REQUIRES: four #2-56 screws and PEM nuts for mounting (not supplied mounting holes size shown may differ depending on PEM nut selected)
- NOTE: Sockets must be handled with care when mounting or removing to/from test board to avoid damaging sensitive spring contacts
- TEST PCB DIAMETER "G" : 0.012 [0.31] (small probe 0.40-0.45mm pitch)
- TEST PCB DIAMETER SPRING PROBE PAD PLATING: 30µ [0.75µ] min. Au per MIL-G-45204 over 30µ [0.75µ] min. Ni per SEA AMS-QQ-N-290. Pad must be the same height as top surface of PCB. Please refer to the Custom Socket Drawing supplied by Aries after receipt of your order for your specific application.



ORDERING INFORMATION

<u>Consult Facotry</u> For Quotation with Details of Your Application

CLEANING, HANDLING, MOUNTING & PROBE REPLACEMENT INFO

Need a Breakout Board? SPECIAL THERMAL REQUIREMENT WORKSHEET

A detailed device drawing must be sent to Aries to quote and design a socket.

See Data Sheet for... **CSP Sockets** <u>23016</u> Hybrid Socket <u>23021</u> µBGA up to 6.5mm <u>23017</u> µBGA up to 13mm <u>23018</u> µBGA up to 27mm <u>23018-APP</u> w/Adj Pressure Pad <u>23019</u> µBGA up to 40mm <u>23020</u> µBGA up to 55mm 23023 Optical Failure Analysis

RF Sockets

24013 RF up to 6.5mm 24008 RF up to 13mm 24009 RF up to 27mm 24009-APP w/Adj Pressure Pad 24011 RF up to 40mm 24012 RF up to 55mm 24010 RF Machined Socket

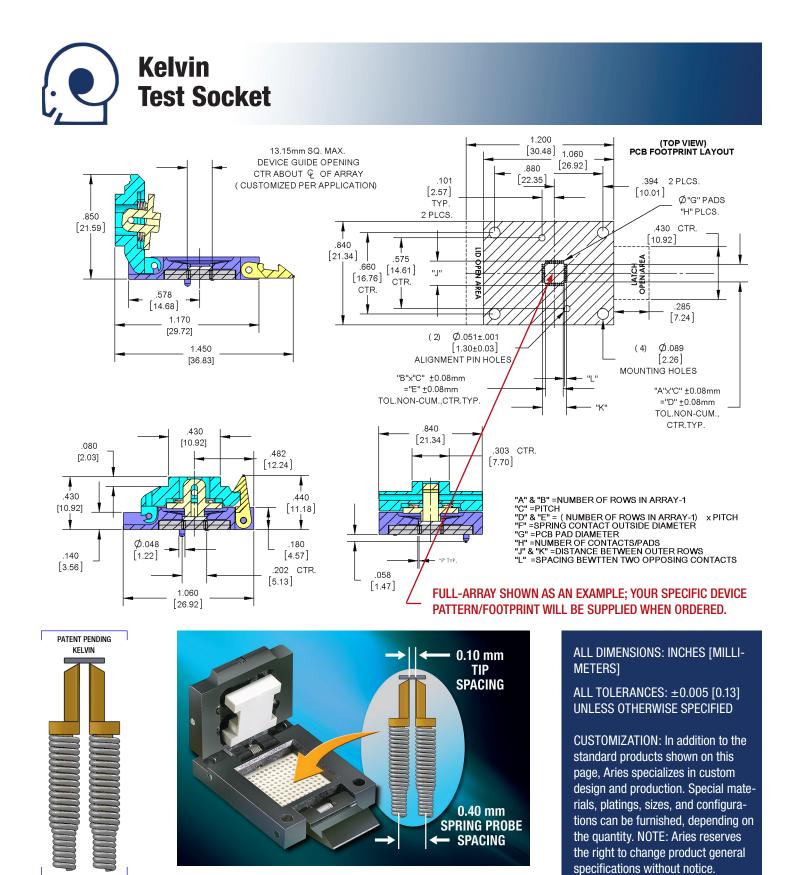


23022 1 of 2 Rev. 1.9

ELECTRONICS, INC.

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

PRINTOUTS OF THIS DOCUMENT MAY BE OUT OF DATE AND SHOULD BE CONSIDERED UNCONTROLLED



.40mm & Larger PITCH

SPRING PROBES



Bristol, PA 19007-6810 USA

TEL (215) 781-9956 • FAX (215) 781-9845



23022 2 of 2 Rev. 1.9