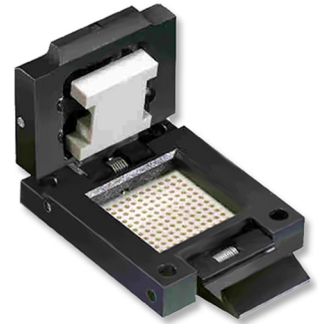




Kelvin Test Socket

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, μ BGA, 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 **Probe Replacement System**: 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].



ORDERING INFORMATION

Consult Factory
For Quotation with
Details of Your Application

CLEANING, HANDLING, MOUNTING & PROBE REPLACEMENT INFO

Need a Breakout Board?

[SPECIAL THERMAL REQUIREMENT WORKSHEET](#)

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: 50 μ [1.27 μ] min. Au per MIL-G-45204 over 50 μ [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: 30 μ [0.75 μ] min. Au per MIL-G-45204 over 30 μ [0.75 μ] 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.

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

See Data Sheet for...

CSP Sockets

- [23016](#) Hybrid Socket
- [23021](#) μ BGA up to 6.5mm
- [23017](#) μ BGA up to 13mm
- [23018](#) μ BGA up to 27mm
- [23018-APP](#) w/Adj Pressure Pad
- [23019](#) μ BGA up to 40mm
- [23020](#) μ BGA 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



ARIES
ELECTRONICS, INC.

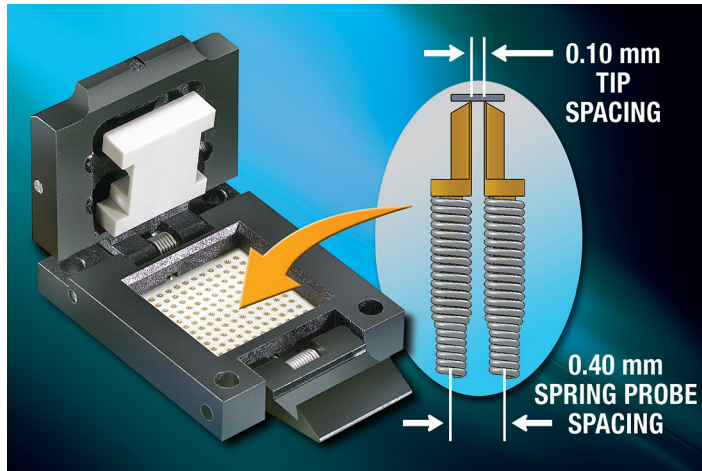
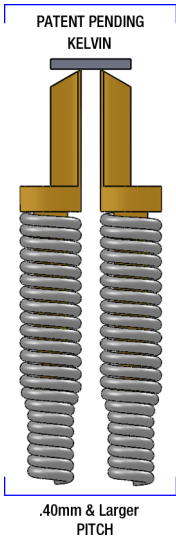
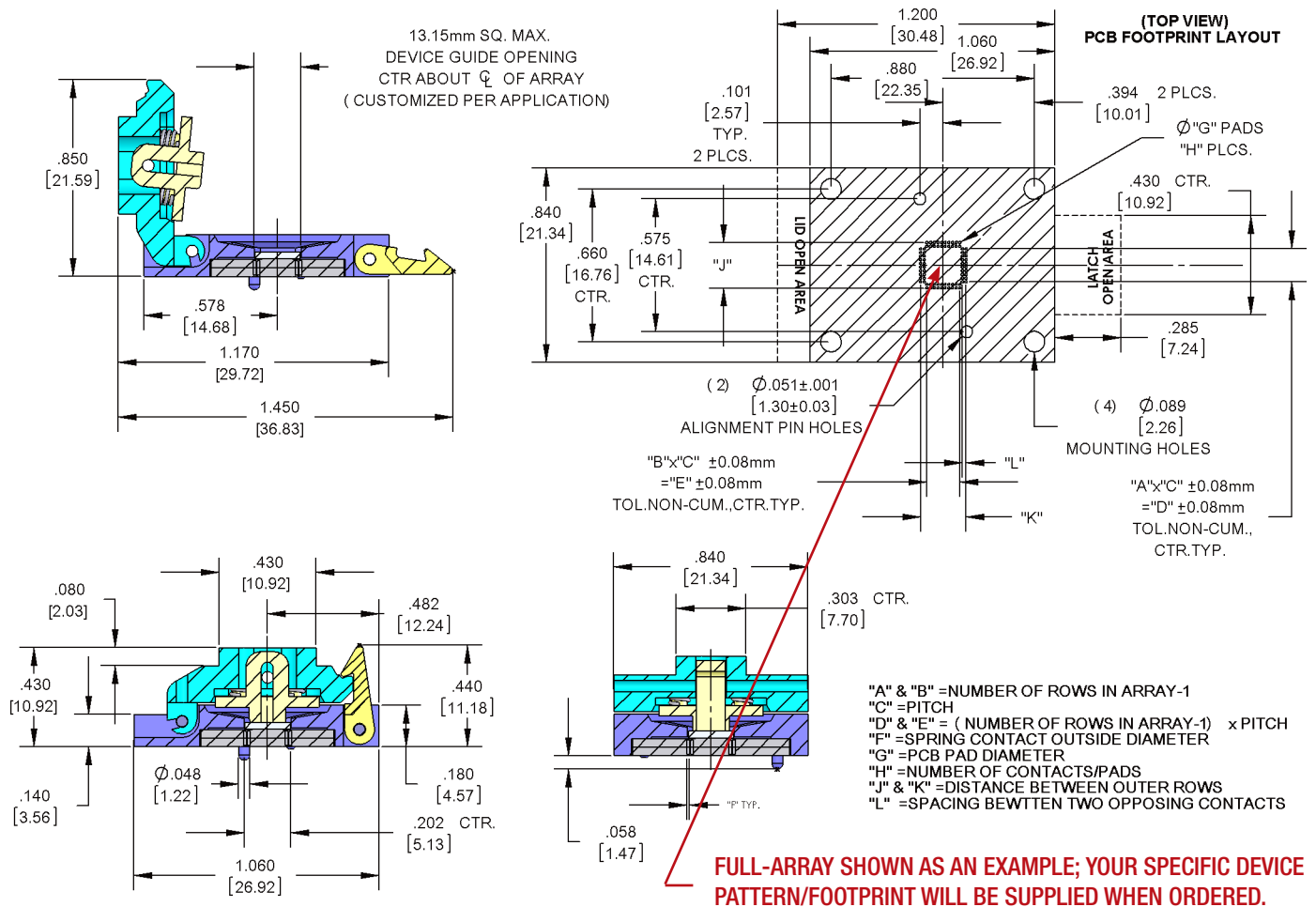
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WWW.ARIESELEC.COM • INFO@ARIESELEC.COM



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Kelvin Test Socket



ALL DIMENSIONS: INCHES [MILLI-METERS]

ALL TOLERANCES: ± 0.005 [0.13] UNLESS OTHERWISE SPECIFIED

CUSTOMIZATION: In addition to the standard products shown on this page, Aries specializes in custom design and production. Special materials, platings, sizes, and configurations can be furnished, depending on the quantity. NOTE: Aries reserves the right to change product general specifications without notice.

SPRING PROBES



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