



# High Frequency Center Probe Test Socket for Devices Up To 13mm Sq.

## FEATURES:

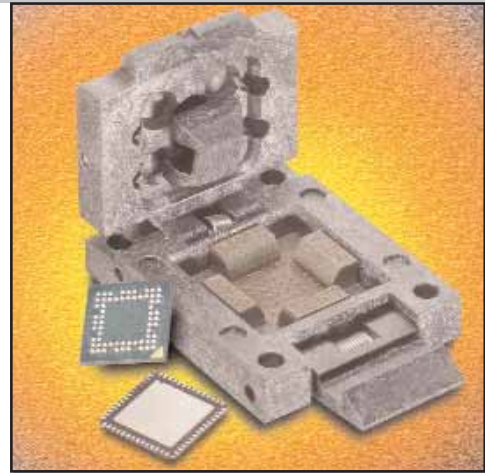
- For Test & Dynamic Burn-In of CSP, MicroBGA, DSP, LGA, SRAM, DRAM and Flash Devices.
- Any pitch device on 0.50mm pitch or higher.
- Socket is easily mounted and removed to & from the PCB due to solderless pressure mount compression spring probes which, are accurately located by two molded plastic alignment pins and mounted with four stainless steel screws.
- The gold over nickel plated compression spring probes leave very small witness marks on the bottom surface of the device solderballs.
- Standard molded socket format can accommodate any device package of 13mm or smaller, by using machined (for small quantities) or custom molded (for large quantities) pressure pads and interposers.
- Pressure pad compression spring provides proper force against device and allows for height variations in device thickness.
- 4 Point crown insures "scrub" on solder balls, and raised tip probe provides "scrub" on pads.
- Signal path during test only .077" (1.95mm)

## SPECIFICATIONS:

- 1dB bandwidth at 18.5 Ghz, < 3dB to 39.7 Ghz (0.50mm pitch).
- Pin inductance: 0.59nH (@ 0.50 mm pitch)
- Mutual Capacitance: 0.12pF
- VSWR < 2:1 to 38Ghz.
- Contact Resistance: < 40 milliohms.
- Compression spring probes are heat treated Beryllium Copper Alloy.
- Compression spring probe plating is 30u" min. [.75um] Gold per Mil-G-45204 over 30u" min. [.75um] Nickel per QQ-N-290.
- Estimated Contact Life = 500,000 cycles min.
- Contact Force = 9-12g per contact.0.50 - 0.75mm Pitch; 17-20g per contact on 0.80mm pitch or larger.
- Operating Temperature = -55°C (min.) to 150°C (max.); -67°F (min.) to 302°C (max.).
- Molded socket components are UL94V-0 Ultem.

## MOUNTING CONSIDERATIONS:

- See "PCB FOOTPRINT TOP VIEW" for requirements.
- Requires (4) Four PEM nuts for mounting (mounting holes size shown may differ depending on PEM nut selected).
- Sockets must be handled with care when mounting or removing sockets to/from PCB to avoid damaging spring contacts.
- Test board PCB diameter = .025" (0.635mm) (large probe) .016" (0.40mm) (small probe)

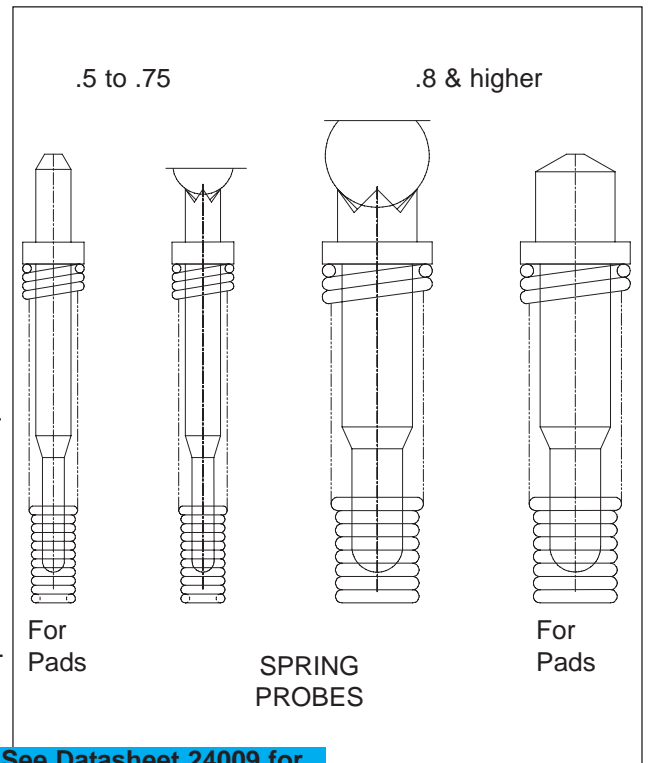


*Note: Aries specializes in custom design and production. In addition to the standard products shown on this page, special materials, platings, sizes, and configurations can be furnished, depending on quantities. Aries reserves the right to change product specifications without notice.*

## ORDERING INFORMATION

CONSULT FACTORY

**PATENT PENDING**



**See Datasheet 24009 for 14-27mm package socket**

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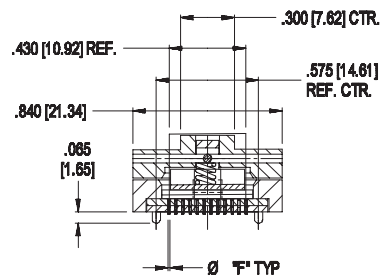
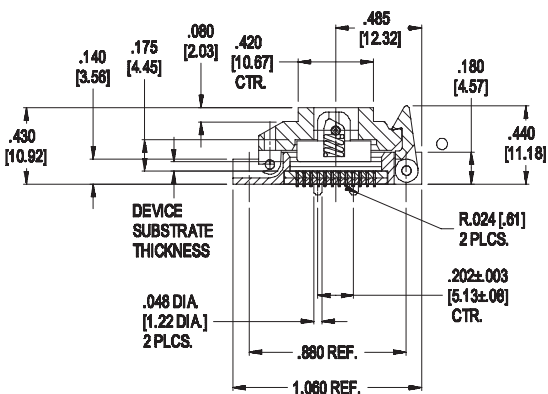
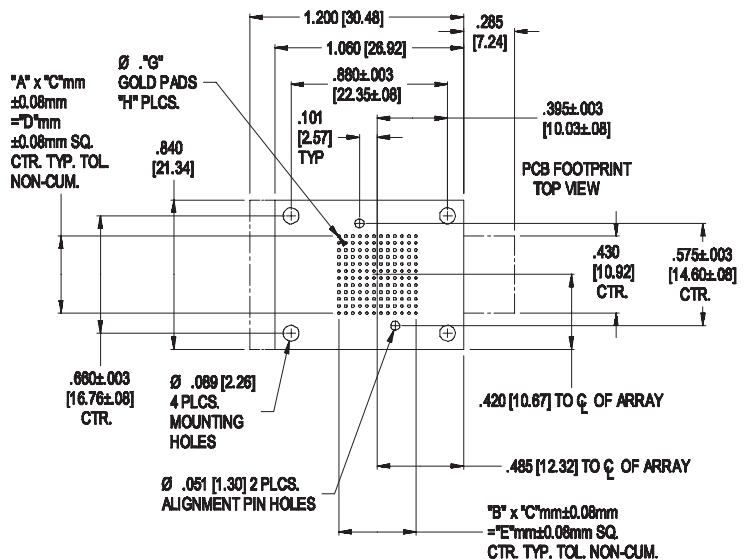
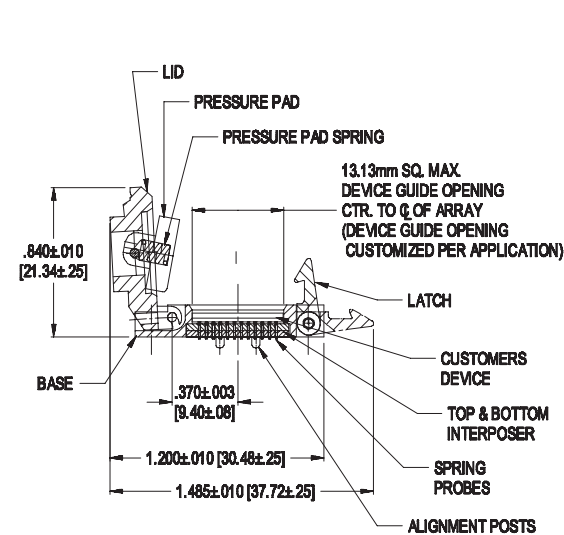
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ALL DIMENSIONS: INCHES [MILLIMETERS] EXCEPT AS DESIGNATED BY mm

Factory will supply socket drawing with "A-H" dimensions. Legible dimensioned device drawing required at quote request and time of order.



"A" & "B"=NUMBER OF ROWS IN ARRAY-1  
 "C"=PITCH  
 "D" & "E"=(NUMBERS OF ROWS IN ARRAY-1) x PITCH  
 "F"=SPRING CONTACT OUTSIDE DIAMETER  
 "G"=PCB PAD DIA.  
 "H"=NUMBER OF CONTACTS/PADS

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