# High-Temp $200^{\circ} \mathrm{C}$ Test \& Burn-In Sockets for BGA, LGA, QFN, MLCC, and Bumped Die Devices 

## KEY PERFORMANCE ELEMENTS - Series AR4HT

- Aries unique universal socketing system allows the socket to be easily configured for any package, on any pitch (or multiple pitch) from 0.2 mm or greater, in any configuration, with little or no tooling charge or extra lead-time.
- For Test \& Burn-In of CSP, $\mu \mathrm{BGA}$, 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 Interposer Replacement System: the complete interposer can be removed and a new one (interposer) and be inserted quickly and easily. This saves time and money in your test setup.
- High-Temperature $200^{\circ} \mathrm{C}$ (high-frequency bandwidth, low inductance, and high-current applications in a reliable and durable socket housing).
- Excellent Compliance (shorter than other low-profile contacts, enables reliable ATE testing and burn-in). Excellent choice for low-cost hand test applications


ORDERING INFORMATION This material can be ordered with ANY Aries CSP/BGA Sockets applications

- It IS an innovative, protected, validated and released product with capacity and quality control available to meet existing and emerging customer needs


## MECHANICAL

- CONTACT LENGTH (compressed): 0.45 mm
- PITCH: Released to $<0.4 \mathrm{~mm}$ - Mixed Pitch Available
- PACKAGES: BGA, LGA, QFN, DFN, CSP, POP - Full and Partial Arrays Available
- STRUCTURE: Silmat ${ }^{\circledR}$ Interposer with Patented Core
- INTERPOSER MATERIALS: Ag Particles in Silicone Elastomer with Polyimide Core (patented)
- COMPLIANCE RANGE/TRAVEL: Up to 0.23 mm
- CONTACT FORCE/LEAD (initial): 20-30 grams/lead
- OPERATING TEMPERATURE: $-55^{\circ} \mathrm{C}$ to $200^{\circ} \mathrm{C}$
- LIFE EXPECTANCY: Silmat ${ }^{\circledR}$ Interposer $>10,000$ actuations (influenced by introduction of bias to the IC and the plating of IC leads will impact the degradation of the contact performance)


ELECTRICAL ( 0.5 mm pitch)

- BANDWIDTH (frequency response): -1dB at $>40 \mathrm{GHz}$
- SELF-INDUCTANCE: 0.10nH
- MUTUAL INDUCTANCE: 0.02nH
- CAPACITANCE TO GROUND: 0.14pF
- MUTUAL CAPACITANCE: 0.01pF
- CONTACT RESISTANCE (initial): $<25 \mathrm{~m} \Omega$
- CURRENT RATING: 4 amps at $14^{\circ} \mathrm{C}$ heat rise

ALL DIMENSIONS: INCHES [MILLIMETERS]
ALL TOLERANGES: $\pm 0.005[0.13]$ UNLESS OTHERWISE SPECIFIED
FOR TEST SOCKET RECEPTACLES, SEE DATA SHEET 10003
dO NOT USE THIS SOCKET IN A BURN-IN OVEN WITH CONTACTS IN OPEN POSITION, AS IT WILL DAMAGE THE SOCKET
CONSULT FACTORY FOR OTHER SIZES AND CONFIGURATIONS


Cross Section Elastomer Matrix Compliant Buttons

CUSTOMIZATION: ARIES SPECIALIZES IN CUSTOM DESIGN AND PRODUCTION. SPECIAL MATERIALS, PLATINGS, SIZES, AND CONFIGURATIONS CAN BE FURNISHED, DEPENDING ON QUANTITY.
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