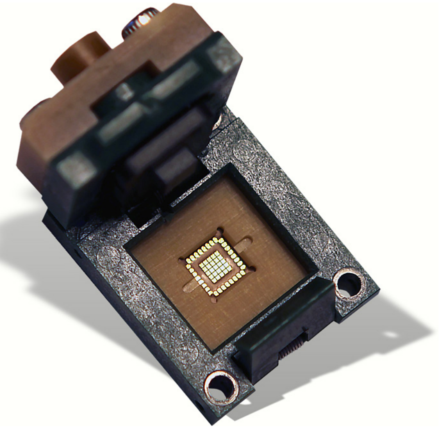
High-Temp 200°C Test & Burn-In Sockets for BGA, LGA, QFN, MLCC, and Bumped Die Devices

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 0.2mm 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 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°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



SILMAT® CONTACT TECHNOLOGY

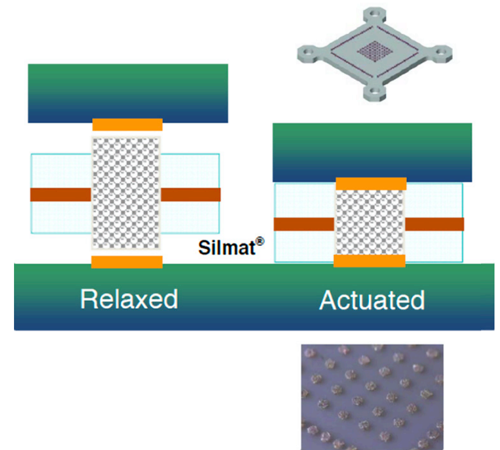
- It is NOT a cheap conductive rubber sheet
- It is NOT a prototype or a copy
- It IS a cost-effective, low profile contact structure engineered with specific materials and features to provide electrical and mechanical advantages for high performance applications
- It IS an innovative, protected, validated and released product with capacity and quality control available to meet existing and emerging customer needs

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

Need a Breakout Board?
SPECIAL THERMAL REQUIREMENT WORKSHEET

MECHANICAL

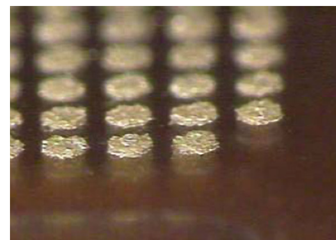
- CONTACT LENGTH (compressed): 0.45mm
- PITCH: Released to <0.4mm – Mixed Pitch Available
- PACKAGES: BGA, LGA, QFN, DFN, CSP, POP – Full and Partial Arrays Available
- STRUCTURE: Silmat® Interposer with Patented Core
- INTERPOSER MATERIALS: Ag Particles in Silicone Elastomer with Polyimide Core (patented)
- COMPLIANCE RANGE/TRAVEL: Up to 0.23mm
- CONTACT FORCE/LEAD (initial): 20-30 grams/lead
- OPERATING TEMPERATURE: –55°C to 200°C
- LIFE EXPECTANCY: Silmat® 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)



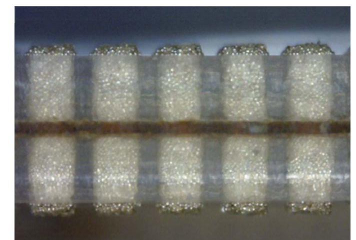
INTERPOSER

ELECTRICAL (0.5mm pitch)

- BANDWIDTH (frequency response): -1dB at >40GHz
- SELF-INDUCTANCE: 0.10nH
- MUTUAL INDUCTANCE: 0.02nH
- CAPACITANCE TO GROUND: 0.14pF
- MUTUAL CAPACITANCE: 0.01pF
- CONTACT RESISTANCE (initial): <25mΩ
- CURRENT RATING: 4 amps at 14°C heat rise



Cross Section
Elastomer Matrix Compliant Buttons



Column Array
Ag Particles

ALL DIMENSIONS: INCHES [MILLIMETERS]
ALL TOLERANCES: ±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

CUSTOMIZATION: ARIES SPECIALIZES IN CUSTOM DESIGN AND PRODUCTION. SPECIAL MATERIALS, PLATINGS, SIZES, AND CONFIGURATIONS CAN BE FURNISHED, DEPENDING ON QUANTITY.
ARIES RESERVES THE RIGHT TO CHANGE PRODUCT GENERAL SPECIFICATIONS WITHOUT NOTICE
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