

# Hi-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 <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.
- High-Temperature 200°C (high-frequency bandwidth, low inductance, high-current, reliable, durable).
- 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.

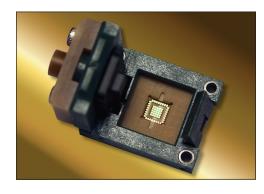
#### **MECHANICAL**

- 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<sup>®</sup> 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 (0.5mm 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):  $<25m\Omega$
- CURRENT RATING: 4 amps at 14°C heat rise

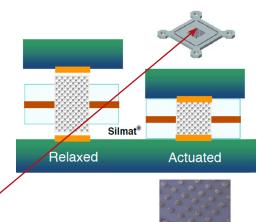
See Assembly and Maintenance Instructions



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

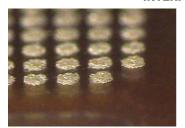
Need a Breakout Board?

SPECIAL THERMAL REQUIREMENT WORKSHEET

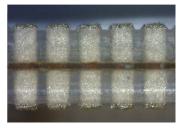




#### **INTERPOSER**



**Column Array** Elastomer Matrix Compliant Buttons



Cross Section
Ag Particles



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