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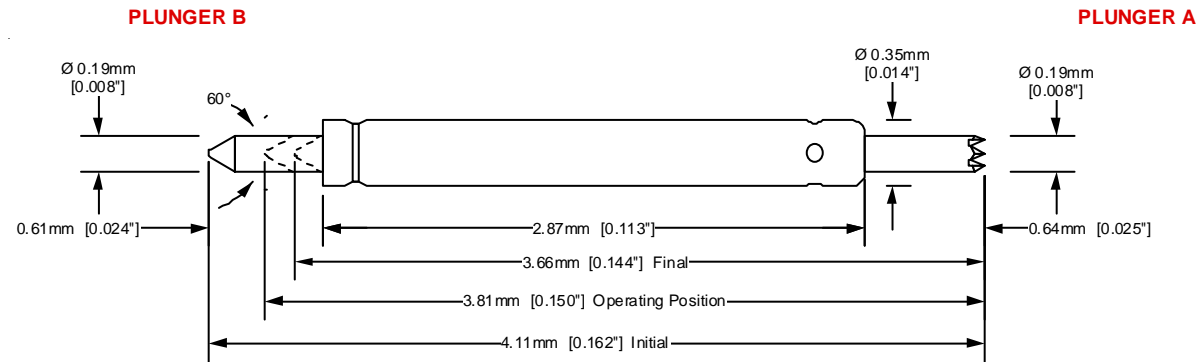
Spring Pin Test Report

**High Performance
IC Sockets And
Test Adaptors**

IP, Mar 2011

Pin Configuration

Pitch: 0.5mm



MATERIAL:

Plungers: Hardened Steel / Finish- Gold Plated

Barrel: Copper Alloy / Finish- Gold Plated

Spring: Stainless Steel / Finish- Gold Plated

ELECTRICAL DATA:

Average Resistance: 82.28mOhms

Probe Self Inductance: 1.3 nH

Propagation Delay: 28 picoseconds

Insertion Loss: < 0.25 dB up to 4.5 GHz

Cross Talk: < -15 dB up to 6.5 GHz

Rise Time: 26 picoseconds

Capacitance: 0.53 pF

NOTES:

1. Force: 7 grams [0.25 oz.] initial, 16 grams (0.56 oz.) at 0.150" [3.81mm] operating position (0.012" deflection).
Test Method: Release rate 1.6 grams / 0.001" [0.025mm]
2. Indent Form: Either 4 way conical indent or roll crimp, 2 places.
3. Plunger "A" is a fixed plunger.

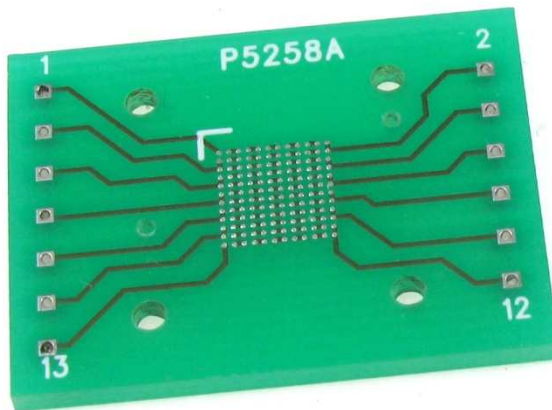
Socket Configuration



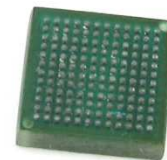
Socket in assembled state

Test procedure:

1. Mount socket to the test board
2. Place daisy chained test chip inside the socket
3. Close socket lid and apply recommended pressure
4. Using multi meter read contact resistance of complete chain and record contact resistance per pin
5. Open socket, remove and reseat test chip
6. Repeat step 3 and 4
7. After 10 insertions, reflow test chip.

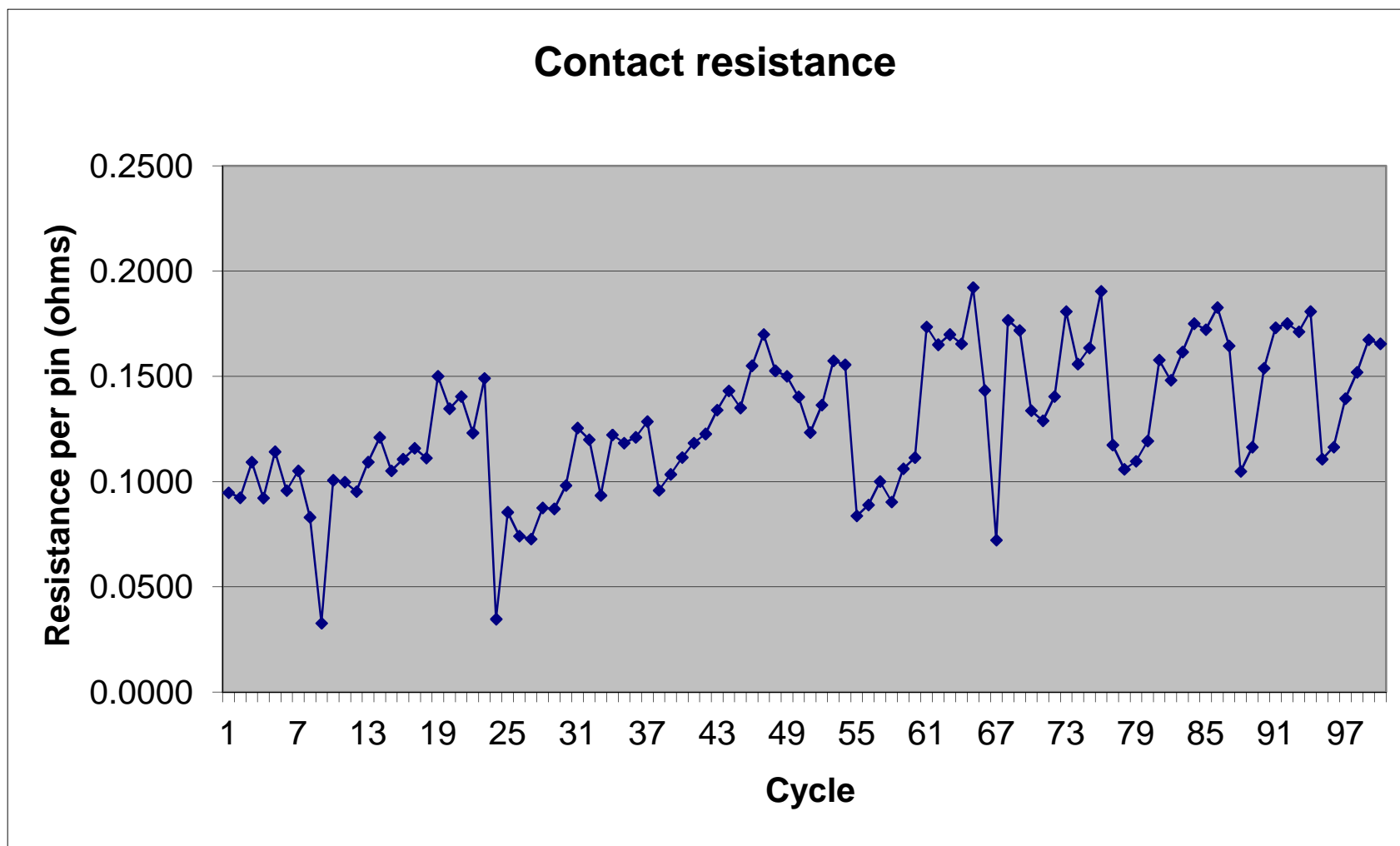


Daisy chained test chip (lead & lead free) and test board (lead)



Pitch: 0.5mm

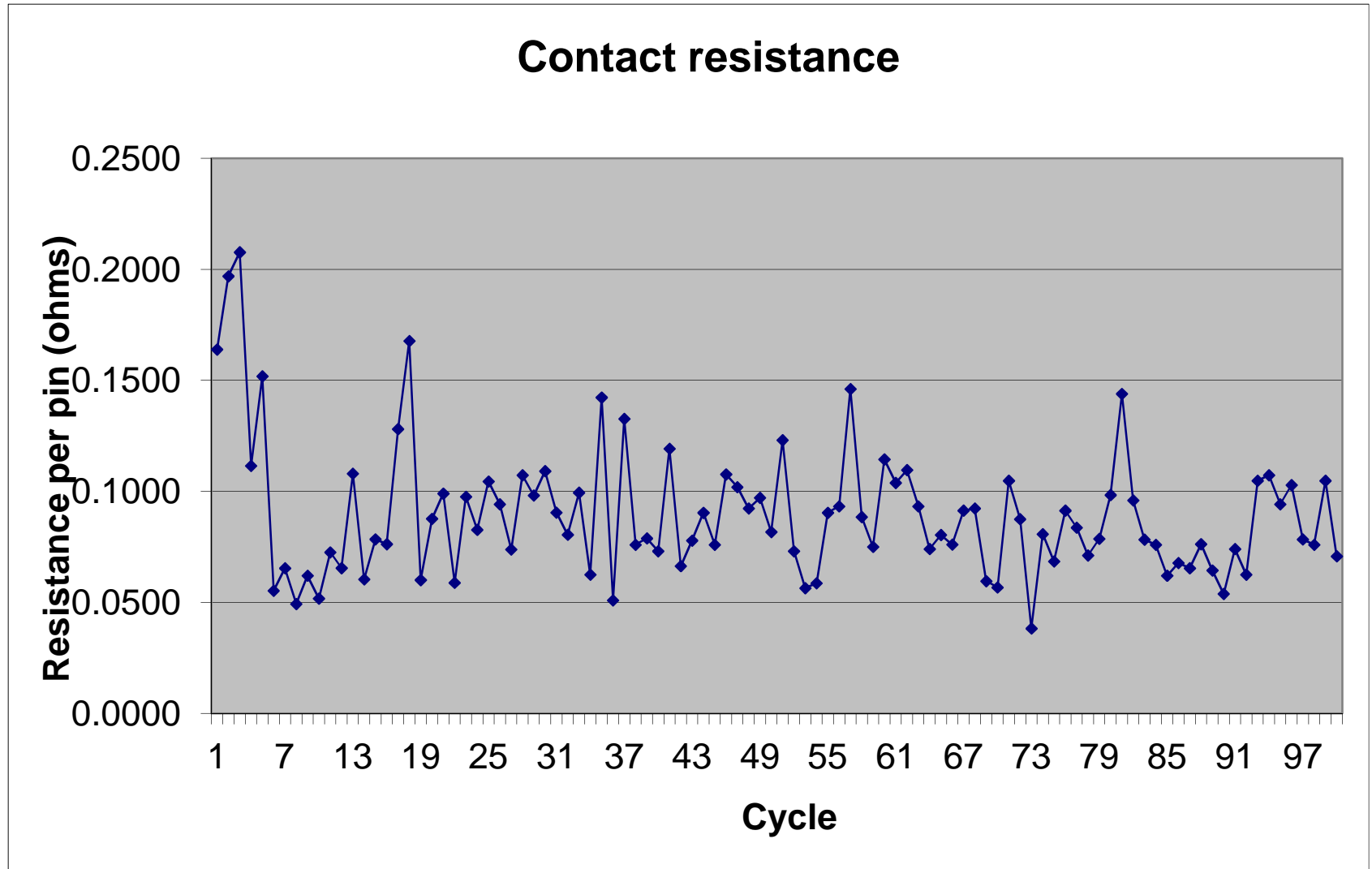
Test Data (SnPb Test Chip)



Average: 0.128 ohms

Standard Deviation: 0.033 ohms

Test Data (SnAgCu Test Chip)



Average: 0.089 ohms

Standard Deviation: 0.030 ohms