

## Low Current Probe Cards—Silver Series

### Introduction

As the semiconductor industry continues to chart a technology road map with decreasing technology sizes, the need to simultaneously test multiple low current devices becomes critical. To answer this demand, Micromanipulator developed the Silver Series line of probe cards.

Designed for femtoamp level measurements, The Micromanipulator Silver Series of probe cards have been designed to provide high performance probing with up to 72 probe points. Featuring high isolation ceramic blades with the active signal guard extended all the way to the probe tip, the Silver Series can produce the single-digit femtoamp measurements previously achievable only with individual triaxial probes. Designed with Micromanipulator's extensive analytical probing experience, the Silver Series fits standard analytical prober probe card holders.

### Features

- Configurations of up to 72 probe points available.
- High isolation ceramic blades with active guard path extended all the way to the probe tip.
- Integrated, low triboelectric, high isolation cabling avoids losses and noise generated in probe card to cable connectors.
- A high conductivity, low permeability shield which protects the probes and guarded connection path both physically and from electrical noise.
- External triaxial cables are anchored at the interface to the internal guarded path to prevent strain on the ceramic blades.
- Up to 3 meter long cables (ordered separately) allows flexibility in placement of test equipment
- Physical probe card and cable configuration fits standard 4.5" probe card holders DOES NOT REQUIRE A SPECIAL PROBER PLATEN.
- Probe contact physical layout or provide a sample device.
- Prober stage travel and chuck size, either 6" (150mm) only or up to 8" (200mm).
- Choice of Silver "A" or "B" performance range.
- If an edge (touchdown) sensor is desired and preferred location.

### Specifications

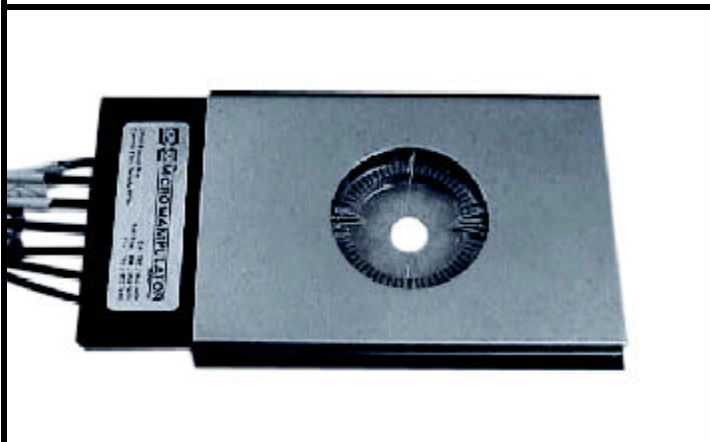
#### Silver "A" Series

- Leakage
  - < 5 fA at 25 degrees C.
  - < 10 fA at 120 degrees C.
- Noise
  - < 10 fA at 25 degrees C.
  - < 20 fA at 120 degrees C.
- Maximum Temperature: 150 Degrees C.
- Maximum Pin Count: 48 probes.

#### Silver "B" Series

- \*Leakage
  - < 25 fA at 25 degrees C.
  - < 50 fA at 120 degrees C.
- Noise
  - < 25 fA at 25 degrees C.
  - < 50 fA at 120 degrees C.
- Maximum Temperature: 150 Degrees C.
- Maximum Pin Count: 72 probes.

Low Current Probe Card



1555 Forrest Way Tel: 775-882-2400  
Carson City, NV 89706 Tel: 800-654-5659  
info@micromanipulator.com Fax: 775-882-7694  
www.micromanipulator.com Made in the USA

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Specifications subject to change without notice.