1. **Recommended mounting method of the Opti-Cap® to soft or hard substrate using conductive epoxy.**

Mounting Recommendations to achieve design performance:
- Bottom surface of the Opti-Cap®, is to always be in direct contact with the circuit trace.
- Reflections will be minimized when a 50Ω micro-strip line width is approximately .020” to .025” (.508 - .635mm).
- The break in the micro-strip should be in the range of .015”-.020” (.308 -.508mm).
- The maximum processing temperatures is +150°C for non-solderable versions.

### A. Deposit Conductive Epoxy:
1. Place a single conductive epoxy drop on each micro-strip as illustrated; the edge of the epoxy shall be at least .003”-.004” (.076 -.102 mm) back from the edge of the trace to prevent filling the gap with epoxy.
2. Each epoxy dot shall be approximately .010” - .015” (.254 - .381 mm) in diameter and .003” - .005” (.076 - .127 mm) thick. Note: A 1 mil (.0254mm) high epoxy dot will typically result in a pad 10 mils by 15 mils (.254mm x .381mm).

### B. Perform Opti-Cap® Attachment:
1. The Opti-Cap® shall be placed on the micro-strip Milli-Cap® down.
2. Alignment of the Opti-Cap® is best performed by aligning the Milli-Cap® to the trace:
   - Center the Milli-Cap® length to the gap in the trace.
   - Center the Milli-Cap® width to the trace width.
   - The Milli-Cap® terminations (end caps) shall fall within the individual epoxy drop on each trace.
   - Use even pressure to make connection.

### C. Cure Epoxy:
- Typical Epoxy such as Ablebond 84-1 LMI by ABLESTIK
- Cure According to Manufacturer’s Preferred Schedule.
- Typically 125°C to 150°C max
2. **Recommended mounting method of the Opti-Cap® to soft or hard substrate using solder.**

Mounting Recommendations to achieve design performance:

- Bottom surface of the Opti-Cap®, is to always be in direct contact with the circuit trace.
- Reflections will be minimized when a 50Ω micro-strip line width is approximately .020” to .025” (.508 - .635mm).
- The break in the micro-strip should be in the range of .015”-.020” (.308 -.508mm).
- The maximum processing temperature +250°C for solderable versions.

**A. Deposit Solder:**

1. Place a single conductive solder drop on each micro-strip as illustrated; the edge of the solder shall be at least .001”- .002” (.025 -.051 mm) back from the edge of the trace to prevent filling the gap with solder.
2. Each solder drop shall be approximately .020” - 025” (.508 - .635mm) in diameter and .004” - .006” (.102 - .152mm) thick.

**B. Perform Opti-Cap® Attachment:**

1. The Opti-Cap® shall be placed on the micro-strip Milli-Cap® down.
2. Alignment of the Opti-Cap® is best performed by aligning the Milli-Cap® to the trace:
   - Center the Milli-Cap® length to the gap in trace.
   - Center the Milli-Cap® width to the trace width.
   - The Milli-Cap® terminations (end caps) shall fall within the individual solder drop on each trace.
   - Use even pressure to make connection.

**C. Reflow Solder:**

- Typical solder such as SN62, SN63, etc.
- Reflow according to manufacturer’s preferred cure schedule.
- Reflow temperature based on solder selected (not to exceed +250°C max.)
- After reflow, the solder fillet formed should be visible on exterior edges of Milli-Cap®. 