

High Current Solution

C.C.P. offers a patented solution for high-current Pogo-Pin testers that can be used in a variety of applications such as EV Battery testing or other industrial applications. The design is customizable and can be fitted to your specific requirements. The design offers a much more reliable current flow and reduces the wear on the tester significantly.

Design Concept

Double-Ended High Current Probe for IC Test



Current Path of...

General pin: Blue line

High current pin: Red line

Taiwan Patent No.: M453149

Generally, current runs from bottom plunger through barrel wall to top plunger while the contact resistance between wall and plunger will increase gradually hence the current route between top and bottom plunger will transfer from barrel to spring that might induce spring burn out. The straight plunger in the center of high current pin allow current avoid flowing through spring during testing.

Single High Current Pin for Lithium Battery Test



CCP innovated a special design which is different from standard testing pin to increase the current rating of high current pin.

Coaxial High Current Pin for Lithium Battery Test

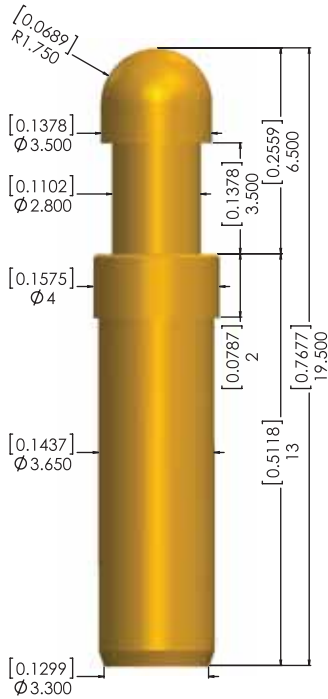


The integration of sense pin and force pin form into coaxial pin. Force pin is designed in one piece to endure higher current.

Probe Specification (Single Probe)

Unit:mm; []:in

H101001M1



Material

Plunger

BeCu , Au plated

Barrel

Brass , Au plated

Spring

SUS , Au plated

Mechanical Spec.

Recommended travel

2.30mm

Full travel

3.5mm

Spring force

250g±20%@2.3mm

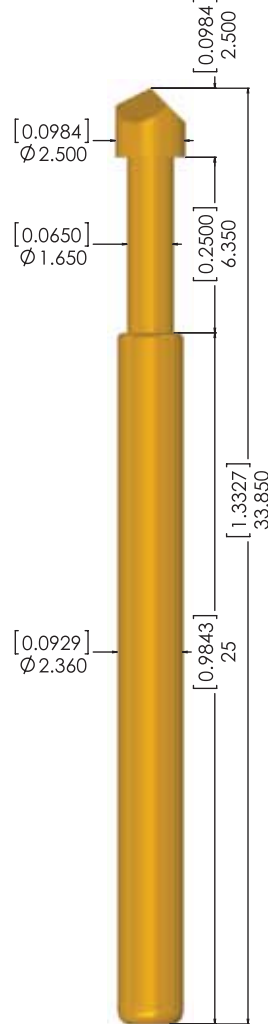
Operating Temp

-55°C~150°C

Current Rating

10 A

S-11T1-2545G



Material

Plunger

BeCu , Au plated

Barrel

Brass , Au plated

Spring

SUS , Au plated

Mechanical Spec.

Recommended travel

4.20mm

Full travel

6.35mm

Spring force

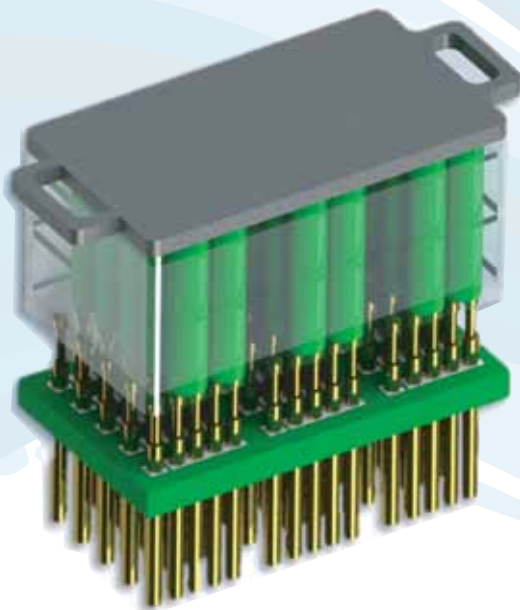
450g±20%@4.20mm

Operating Temp

-55°C~150°C

Current Rating

6 A

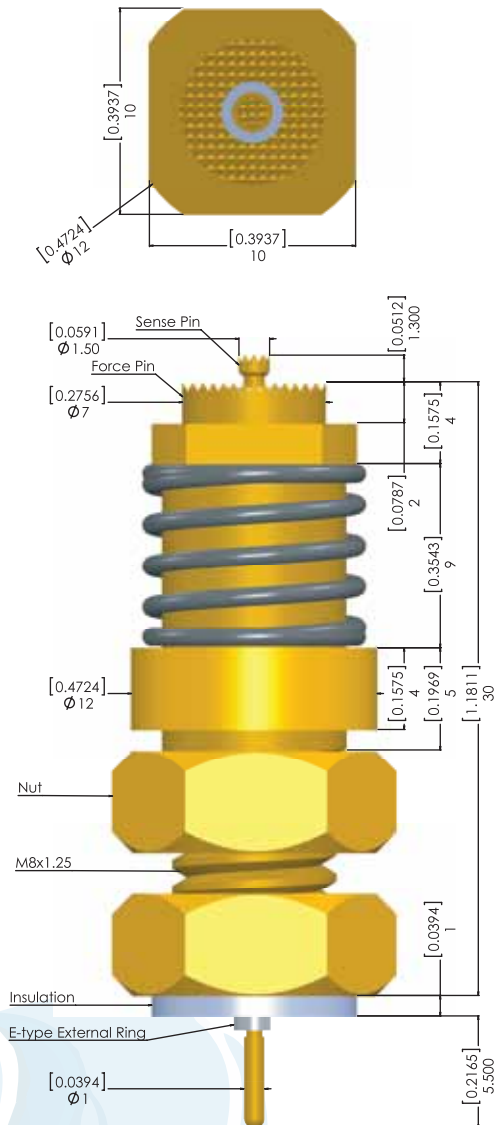


Application Demonstration

Probes inserting in PCB to loop circuit together for activating lithium battery.

Probe Specification (Coaxial Probe)

Unit:mm; []:in



H050002M0

Material

Sense Pin

Plunger

BeCu , Au plated

Barrel

PhBz , Au plated

Spring

SUS , Au plated

Force Pin

Plunger

BeCu , Au plated

Barrel

Brass , Au plated

Spring

SUS , Au plated

Nut

BeCu , Au plated

Insulation

Teflon

Mechanical Spec.

Sense Pin

Recommended travel

1.00mm

Full travel

1.50mm

Spring force

90g \pm 20%@1.00mm

Force Pin

Recommended travel

4.00mm

Full travel

6.00mm

Spring force

700g \pm 20%@4.00mm

Current Rating

50 A

Application Demonstration

If single point testing requires higher current capacity only to adjust the pin dimension then would be able to meet the current rating requirement.

