

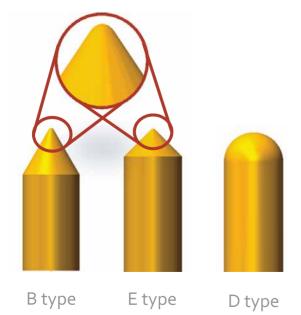
# **Panel Test**

Most electronic devices use displays to interact with the user. Those displays are often fragile which requires appropriate testing solutions. Pogo pins are especially suitable for this type of application due to their customized tip, which protects the DUT from scratches.

# Design Concept



Panel Pin Housing



## Panel Test Housing

The housing is installed on a test head which contacts the panel directly. To protect the panel from damage, the head is rounded which prevents scratching of the panel surface.

Panel Pin Housing	Specification
Min. Pitch	o.45 mm
Panel Size	50″~85″
<b>Housing Material</b>	Peek
Life Time (Pin)	>200,000

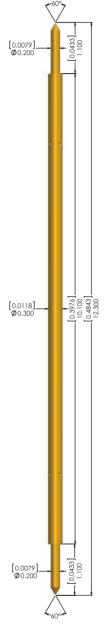
# Panel Pin Head Type

A conical tip is able to puncture oxide layers and has a low chance to leave scratches on the display. We usually recommend the D type for panel tests, to eliminate the chance of scratches.

# **Probe Specifications**

Unit:mm; [ ]:in

## DE1-030BB10-01A0



### Material

Top Plunger Sk4, Au plated Barrel PhBz, Au plated Spring SWP, Au plated **Bottom Plunger** Sk4, Au plated

## Mechanical Spec.

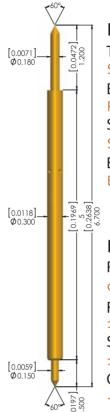
Recommened Travel

1.25mm

**Full Travel** 1.90mm Spring Force 20g±20%@1.25mm Operating Temp.

-15°C~125°C

# DE1-030BB50-01A0



#### Material

Top Plunger Sk4, Au plated Barrel PhBz, Au plated Spring SWP, Au plated **Bottom Plunger** BeCu, Au plated

## Mechanical Spec.

Recommened Travel

0.65mm

**Full Travel** 1.00mm

Spring Force 13q±20%@0.65mm

Operating Temp.

-15°C~125°C

**Electrical Spec.** Pitch: 0.4mm Socket Material: Peek 1000

Capacitance 1 pF



Current Rating 1A continuous Contact Resistance  $<175m\Omega(AVG)$ Characteristic Impedance  $67\Omega$ Insertion Loss -1dB@3.34GHz Return Loss -2odB@o.87GHz Time Delay 67.01 psec Loop Inductance 4.49 nH

**Electrical Spec.** Pitch: 0.4mm Socket Material: Peek 1000





Current Rating 1A continuous Contact Resistance  $<175m\Omega(AVG)$ Characteristic Impedance  $45\Omega$ Insertion Loss -1dB>20GHz Return Loss -2odB@3.35GHz Time Delay 32.8 psec Loop Inductance 1.48 nH Capacitance 0.73 pF



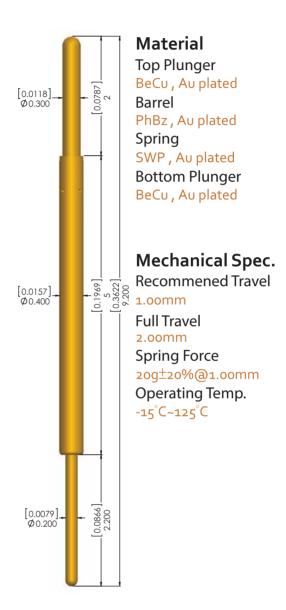
# **Probe Specifications**

Unit:mm; [ ]:in

## DE3-031DD50-01A0

# Material Top Plunger BeCu, Au plated [0.0091] Ø0.230 PhBz, Au plated Spring SWP, Au plated **Bottom Plunger** BeCu, Au plated Mechanical Spec. 0.2000] 5.080 0.3575] 9.080 [0.0122]. Ø0.310 **Recommened Travel** 1.00mm **Full Travel** 2.00mm **Spring Force** 20g±20%@1.00mm Operating Temp. -15°C~125°C [0.0071] Ø0.180

# DE3-040DD50-01A0



#### Electrical Spec.



Current Rating 1A continuous Contact Resistance <75m $\Omega(AVG)$ Characteristic Impedance 41.54 Ω Insertion Loss -1dB@14.66GHz Return Loss -20dB@2.03GHz Time Delay 42.37 psec Loop Inductance 1.76 nH Capacitance 1.02 pF

#### **Electrical Spec.** Pitch: 0.5mm Socket Material: Peek 1000



Current Rating 1A continuous Contact Resistance  $<75m\Omega(AVG)$ Characteristic Impedance  $42.13\Omega$ Insertion Loss -1dB@10.93GHz Return Loss -20dB@2.05GHz Time Delay 46.76 psec Loop Inductance 1.97 nH Capacitance 1.11 pF



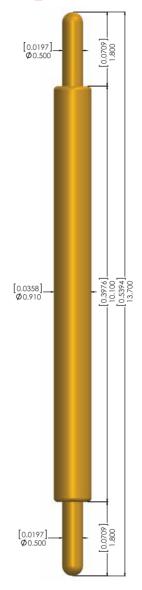
# **Probe Specifications**

Unit:mm; [ ]:in

# DE3-040DD85-01A0

# Material **Top Plunger** [0.1378] [0.0118] BeCu, Au plated PhBz, Au plated Spring SUS, Au plated **Bottom Plunger** BeCu, Au plated Mechanical Spec. [0.3366]\_ 8.550 \_[0.612]\_ \_15.550 Recommened Travel [0.0157] 2.50mm **Full Travel** 3.00mm **Spring Force** 20g±20%@2.50mm Operating Temp. -55°C~150°C [0.1378] 3.500 [0.0079] Ø0.200

# DE1-091DD10-01A0



### Material

**Top Plunger** BeCu, Au plated Barrel PhBz, Au plated Spring SWP, Au plated **Bottom Plunger** BeCu, Au plated

### Mechanical Spec.

**Recommened Travel** 

2.00mm **Full Travel** 3.00mm Spring Force 20g±20%@2.00mm Operating Temp. -15°C~125°C

# **Electrical Spec.**



Current Rating 1A continuous Contact Resistance <75m $\Omega(AVG)$ Characteristic Impedance  $40 \Omega$ Insertion Loss -1dB@6.08GHz Return Loss -2odB@1.06GHz Time Delay 74.8 psec Loop Inductance 3 nH Capacitance 1.87 pF

# **Electrical Spec.**



Current Rating <sup>2A</sup> continuous Contact Resistance <175m $\Omega(AVG)$ Characteristic Impedance  $^{24.2}\Omega$ Insertion Loss -1dB@1.52GHz Return Loss -20dB@0.28GHz Time Delay 72.6 psec Loop Inductance 1.76 nH Capacitance 3 pF