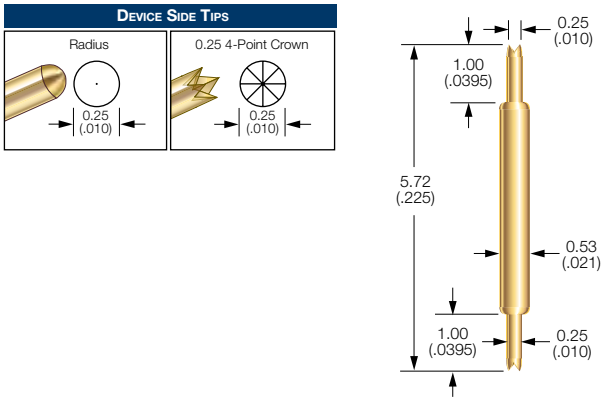
Semiconductor Probes 0.65mm & 0.80mm Pitch

100938 Probe



Probe Specifications

Minimum Device Pitch: 0.65mm (.026)
Signal Path Length: 4.75mm (.187)
Force per Contact: 31g (1.1oz.) @ 0.97mm (.038) travel
Device Compliance: 0.48mm (.019)
DUT Board Compliance: 0.48mm (.019)
Operating Temperature: -55°C to 150°C
Insertions: > 500,000

Materials

Barrel: Nickel/silver, gold plated
Spring: Stainless steel, gold plated
Device Side Contact: Full-hard beryllium copper, gold plated
Board Side Contact: Full-hard beryllium copper, gold plated

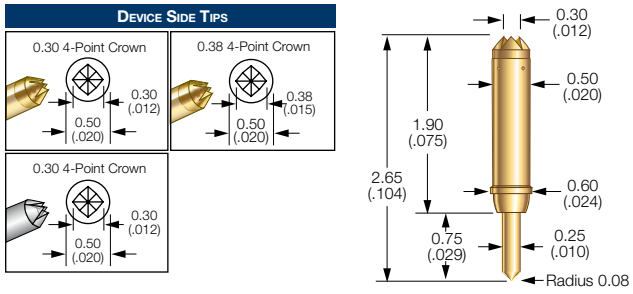
Electrical Specifications

Typical Resistance: < 70 mΩ
Current Carrying Capacity: 3 amps continuous
(Current DC carry capability @ 80° C steady state)
Pattern 2a: R S R @ 0.65mm pitch
Characteristic Impedance: 50 Ω
Time Delay: 31 pSec
Loop Inductance: 1.46 nH @ 0.75mm pitch
Signal Pin to Return Capacitance: 0.10 pF
-1 dB Insertion Loss Bandwidth: > 2.4 GHz

How to Order

Part No.	Device Side Tip	PCB Side Tip
100938-001	0.25 4-pt Crown	0.25 4-pt Crown
100938-014	0.25 4-pt Crown	Radius
100938-016	Radius	Radius

623-0270 Probe



Probe Specifications

Minimum Device Pitch: 0.80mm (.031)
Signal Path Length: 2.15mm (0.085)
Force per Contact: 27.5g (0.97 oz.) @ 0.50mm (.020) travel
Device Compliance: 0.30mm (.012)
DUT Board Compliance: 0.20mm (.008)
Operating Temperature: -55°C to 120°C
(Higher operating temperature probes available, consult factory)
Insertions: > 500,000

Materials

Barrel: Phosphorous bronze, gold plating
Spring: Music Wire, gold plated
Device Side Contact:
01 & 03 Carbon steel, gold plated
H1 Homogeneous alloy
Board Side Contact: Full-hard beryllium copper, gold plated

Electrical Specifications

Typical Resistance: < 40 mΩ
Current Carrying Capacity: 3 amps continuous
(Current DC carry capability @ 80° C steady state)
Pattern 2a: R S R @ 0.8mm pitch
Characteristic Impedance: 44 Ω
Time Delay: 14 pSec
Loop Inductance: 0.59 nH
Signal Pin to Return Capacitance: 0.31 pF
-1 dB Insertion Loss Bandwidth: > 20 GHz

How to Order

Part No.	Device Side Tip	PCB Side Tip
623-0270-01	0.30 4-pt. Crown	Conical
623-0270-03	0.38 4-pt. Crown	Conical
623-0270-H1	0.30 4-pt. Crown	Conical

H1 has the homogeneous alloy on the device side of the contact.

Prolonged exposure of greater than one hour reduces the maximum operating temperature of music wire springs to 85°C.

Specifications subject to change without notice. Dimensions in millimeters (inches)