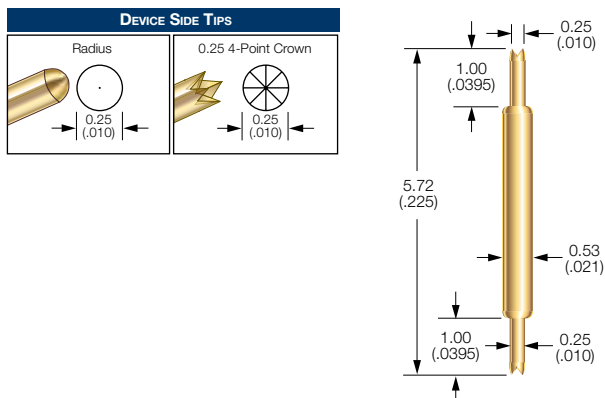


# Semiconductor Probes 0.65MM & 0.80MM PITCH

## 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

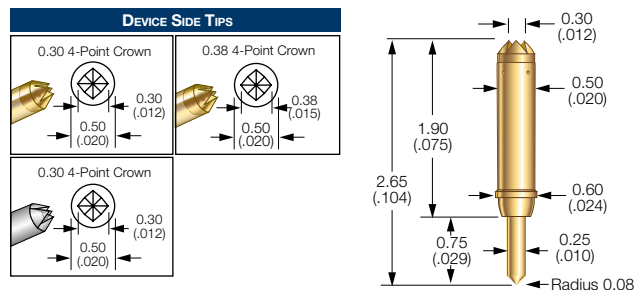
### ELECTRICAL SPECIFICATIONS

**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)