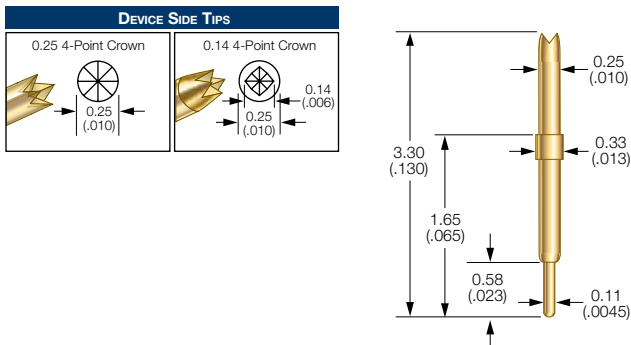


# Semiconductor Probes 0.40MM PITCH

## 101303 PROBE



### PROBE SPECIFICATIONS

**Minimum Device Pitch:** 0.40mm (.016)  
**Signal Path Length:** 2.92mm (.115)  
**Spring Force per Contact:**  
 202 & 210 - 21.2g (0.75 oz.) @ 0.38mm (.015) travel  
 207 & 211 - 16.7g (0.59 oz.) @ 0.38mm (.015) travel  
**Device Compliance:** 0.25mm (.010)  
**DUT Board Compliance:** 0.15mm (.006)  
**Operating Temperature:**  
 -55°C to 150°C for stainless steel spring  
 -55°C to 120°C for music wire spring  
**Insertions:** > 500,000

### MATERIALS

**Barrel:** Beryllium copper, Endura plating  
**Spring:** Stainless steel, gold plated - 17g spring;  
 Music wire, gold plated - 21g spring  
**Device Side Contact:** Full-hard beryllium copper, gold plated  
**Board Side Contact:** Full-hard beryllium copper, gold plated

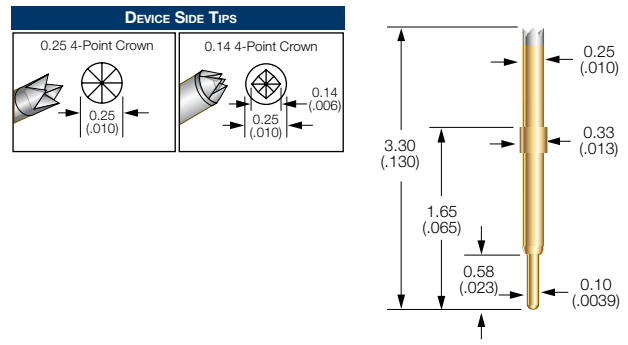
### ELECTRICAL SPECIFICATIONS

**Typical Resistance:** < 40 mΩ  
**Current Carrying Capacity:** 3 amps continuous  
 (Current DC carry capability @ 80° C steady state)  
**Pattern 2a:** R S R @ 0.4mm pitch  
**Characteristic Impedance:** 54 Ω  
**Time Delay:** 19 pSec  
**Loop Inductance:** 1.02 nH  
**Signal Pin to Return Capacitance:** 0.35 pF  
**-1 dB Insertion Loss Bandwidth:** > 20 GHz

### HOW TO ORDER

Part No.	Device Side Tip	PCB Side Tip	Spring Force
101303-202	0.25 4-pt. Crown	Radius	21.2g
101303-207	0.25 4-pt. Crown	Radius	16.7g
101303-210	0.14 4-pt. Crown	Radius	21.2g
101303-211	0.14 4-pt. Crown	Radius	16.7g

## 101795 PROBE



### PROBE SPECIFICATIONS

**Minimum Device Pitch:** 0.40mm (.016)  
**Signal Path Length:** 2.92mm (.115)  
**Force per Contact:** 21g (0.74 oz.) @ 0.38mm (.015) travel  
**Device Compliance:** 0.25mm (.010)  
**DUT Board Compliance:** 0.15mm (.006)  
**Operating Temperature:** -55°C to 120°C  
**Insertions:** > 500,000

### MATERIALS

**Barrel:** Brass, gold plating  
**Spring:** Music wire, gold plated  
**Device Side Contact:** Homogeneous alloy  
**Board Side Contact:** Full-hard beryllium copper, gold plated

### ELECTRICAL SPECIFICATIONS

**Typical Resistance:** < 50 mΩ  
**Current Carrying Capacity:** 3 amps continuous  
 (Current DC carry capability @ 80° C steady state)  
**Pattern 2a:** R S R @ 0.4mm pitch  
**Characteristic Impedance:** 54 Ω  
**Time Delay:** 19 pSec  
**Loop Inductance:** 1.02 nH  
**Signal Pin to Return Capacitance:** 0.35 pF  
**-1 dB Insertion Loss Bandwidth:** > 20 GHz

### HOW TO ORDER

Part No.	Device Side Tip	PCB Side Tip	Spring Force
101795-H2	0.25 4-pt. Crown	Radius	21g
101795-H10	0.14 4-pt. Crown	Radius	21g

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)