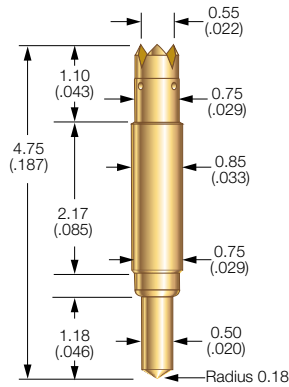
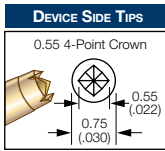


# 1.00MM & 1.27MM PITCH Semiconductor Probes

## 623-0117 PROBE



### PROBE SPECIFICATIONS

**Minimum Device Pitch:** 1.00mm (.039)  
**Signal Path Length:** 3.90mm (.154)  
**Force per Contact:** 35.5g (1.25 oz.) @ 0.85mm (.033) travel  
**Device Compliance:** 0.45mm (.018)  
**DUT Board Compliance:** 0.40mm (.016)  
**Operating Temperature:** -55°C to 120°C  
**Insertions:** > 500,000

### MATERIALS

**Barrel:** Phosphorous bronze, gold plating  
**Spring:** Music wire, gold plated  
**Device Side Contact:** Full-hard beryllium copper, gold plated  
**Board Side Contact:** Full-hard beryllium copper, gold plated

### ELECTRICAL SPECIFICATIONS

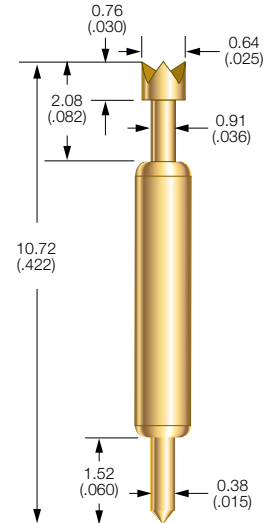
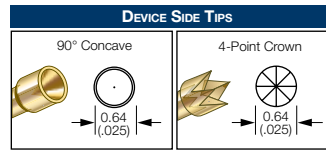
**Typical Resistance:** < 60 mΩ  
**Current Carrying Capacity:** 3 amps continuous  
 (Current DC carry capability @ 80° C steady state)  
**Pattern 2a:** R S R @ 1.27mm pitch  
**Characteristic Impedance:** 43 Ω  
**Time Delay:** 24 pSec  
**Loop Inductance:** 1.02 nH  
**Signal Pin to Return Capacitance:** 0.56 pF  
**-1 dB Insertion Loss Bandwidth:** > 20 GHz

### HOW TO ORDER

Part No.	Device Side Tip	PCB Side Tip
623-0117-02	0.55 4-pt Crown	Conical

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

## 100785 PROBE



### PROBE SPECIFICATIONS

**Minimum Device Pitch:** 1.27mm (.050)  
**Signal Path Length:** 9.2mm (.362)  
**Force per Contact:** 42.5g (1.5 oz.) @ 1.52mm (.060) travel  
**Device Compliance:** 0.76mm (.030)  
**DUT Board Compliance:** 0.76mm (.030)  
**Operating Temperature:** -55°C to 150°C  
**Insertions:** > 250,000

### MATERIALS

**Barrel:** Full-hard beryllium copper, 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:** < 50 mΩ  
**Carrying Capacity:** 3 amps continuous  
 (Current DC carry capability @ 80° C steady state)  
**Pattern 2a:** R S R @ 1.27mm pitch  
**Characteristic Impedance:** 41 Ω  
**Time Delay:** 47 pSec  
**Loop Inductance:** 1.93 nH  
**Signal Pin to Return Capacitance:** 1.15 pF  
**-1 dB Insertion Loss Bandwidth:** > 16.2 GHz

### HOW TO ORDER

Part No.	Device Side Tip	PCB Side Tip
100785-002	.064 4-pt. Crown	Conical
100785-003	90° Concave	Conical

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