







High Current Probes

The maximum continuous current rating of a spring probe is determined by its design, size and construction. Typical probes are rated from 2 to 8 amps maximum continuously current at working travel. While this is sufficient for most board test applications, higher current applications will require a much more solid and rugged probe to withstand current capabilities of 10 to 150 amps and beyond.

ECT High Current Probe Features

- Low resistance plungers
- PogoPlus[®] Bias Ball construction
- High Current optimized base material and plating
- Higher temperature spring design
- Specialized high current tip geometry

Another high current solution is our Feed-Through Plunger probe line. As the name already describes, the plunger moves right through the probe and is made from a single piece, reducing the internal resistance of the probe to a minimum.

With increasing current, any resistance within the probe will generate heat. The higher the current the more heat is generated.

Another consideration is test cycle time. All probes are rated at continuously current carrying capability. During a test sequence the current might not be present at all time, giving the probe time to cool off and potentially being able to carry far more than the rated amps on the datasheet. Please consult our ECT contact for details on higher or pulsed current applications.



HIGH CURRENT PROBES



High Current Benefits Summary

- Multiple probe options to chose from: 10A up to 150A DC
- Consistent and high current carrying capacity
- High force lowers resistance & ensures solid contact Resistance as low as 5 mOhm
- Tips engineered to increase contact points and reduce arcing
- Ideal for high volume production or engineering lab
- Rugged designs for in-line applications



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4.00 (113) - 8.00 (227)

.167" (4.24mm)

10 amps

<25 mOhms



THRU

HC500

5/16-18 UNC THRU

Spring Force in oz. (grams) Recommended Travel Electrical Current Rating DC Average Probe Resistance	4.50 (128) - 8.00 (227) .167" (4.24mm) 15 amps <25 m0hms
Mechanical Spring Force in oz. (grams) Recommended Travel	4.80 (136) - 12.00 (340) .167" (4.24mm)
Electrical Current Rating DC Average Probe Resistance	25 amps <25 mOhms
Machanical	
Spring Force in oz. (grams) Recommended Travel	16.00 (456) - 24.00 (680) .167" (4.24mm)
Current Rating DC Average Probe Resistance	35 amps <25 mOhms
Spring Force in oz. (grams) Recommended Travel	25.70 (729) .167" (4.24mm)
Electrical Current Rating DC BeCu Current Rating DC TeCu Average Probe Resistance	40 amps 50 amps <5 mOhms
Mechanical	
Spring Force in Ibs.(gr) -4 Spring Force in Ibs (gr) -6 Recommended Travel	27.20 (771) - 64 (1814) 24.00 (680) - 96 (2722) .250 (6.35)
Electrical Current Rating DC Average Probe Resistance	100 amps <25 mOhms
Mechanical	
Spring Force in oz. (grams) Recommended Travel	220.8 (6260) .250 (6.35)
Electrical	150 amos
Average Probe Resistance	<25 mOhms

.

Mechanical

Electrical

Mechanical

Spring Force in oz. (grams)

Average Probe Resistance

Recommended Travel

Current Rating DC

.435 [11.05] .500 .430 .260 [6.60] [12.70] [10.92] .575 MIN TRAVEL [14.61] .350 [8.89]

.100 [2.54]

DIAMOND KNURL

3.215 [81.67]

2.855 [72.52]

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_.311 [7.89]

.260 [6.60] MIN TRAVEL