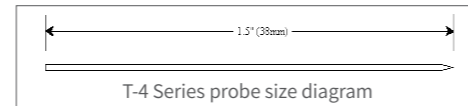


T-4 Series Soft Needles

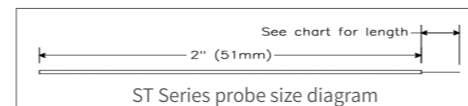
- The T-4 series of soft needles are more widely used in the circuit, electrode, or FIB (focusing ion beam) of the mini electrode.
- The structure of the T-4 series of soft needles is welded to the tin - plated copper rod with different diameter tungsten needle.
- Of which T-4-10 and T-4-22 is customer feedback is have an advantage in the two models, because its needle diameter is small, has a good bending elasticity, can greatly reduce the damage to the chip electrode, under the partial vibration environment can ensure the good contact and electrode.
- T-4 soft needles in a sensitive nodes use is not recommended, because produce capacitive load problem, in this environment, it is recommended to use high impedance Picoprobes series probe.



Model	Tungsten Needle Diameter	Tip Diameter	The Length
T-4-5	5 Micron	<0.2Micron	0.13" (3.3mm)
T-4-10	10Micron	<0.2Micron	0.13" (3.3mm)
T-4-22	22Micron	<0.2Micron	0.20" (5.1mm)
T-4-35	35Micron	<4.0Micron	0.20" (5.1mm)
T-4-60	60Micron	<6.0Micron	0.20" (5.1mm)
T-4-125	125Micron	<10.0Micron	0.20" (5.1mm)

ST Series Hard Needle

- ST series hard needle is 0.020 inch(0.51mm) diameter tungsten needle bar through precision electrochemical processing to become different needle point diameter, length 1.5inch(38.1mm) probe. This probe is used with most of the chip electrodes and line points.
- ST series hard needles can be used with scratches or puncture on the surface passivation layer of the chip. The probe can choose nickel plating on the surface, and "NP" is added if the nickel plating is selected.



Model	Needle Bar Diameter	Tip Diameter
ST-20-0.5	0.020" (0.51mm)	<1 Micron
ST-20-1.0	0.020" (0.51mm)	<2.0Micron
ST-20-2.0	0.020" (0.51mm)	<4.0Micron
ST-20-5.0	0.020" (0.51mm)	<10.0Micron
ST-20-10.0	0.020" (0.51mm)	<20.0Micron

Picoprobe® High Impedance Active Probe:

Application Direction: Small Signal Capacitance Characteristic Test

1. Model 7 and Model 7A(dc to 500 Mhz, 50 ohm)
2. Model 12C (dc to 500 Mhz, 1 Megohm/0.1pF)
3. Model 34A(dc to 3.0 GHz, 10 Megohm/0.1pF)
4. Model 35(dc to 26.0 GHz, 1.25 Megohm/0.05pF)
5. Model 18C and Model 19C (dc to 350 Mhz, 10 femtoamps/0.02pF)
6. Model 28 and Model 29(dc to 1 Ghz, 10 femtoamps/0.04pF)



Microwave Test:

Application Direction: High Frequency Characteristic Test

7. Model 10 (dc to 11 GHz)
8. Model 40A (dc to 40 GHz / 2.9mm K connector input) available with nickel alloy contacts for probing aluminum pads
9. Dual / Differential Microwave Probe (two microwave probes on one positioner - 40A, 50A, 67A, or 110H)
10. Model 40M (ultra low loss - dc to 40 GHz)
11. Model 50A (dc to 50 GHz / 2.4 mm connector input)
12. Model 67A (dc to 67 GHz / 1.85 mm V connector input)
13. Model 110H (dc to 110 GHz / 1.0 mm connector input)
14. Integrated Balun Probes
15. Multi-Contact Wedge (combines multiple RF and DC contacts - dc to 40, 50, 67 or 110 GHz)
16. Probe Cards(surrounds a circuit with high-density RF and DC contacts - dc to 40, 50, 67 or 110 GHz)
17. Model 50 (33 - 50 GHz / WR-22 waveguide input)
18. Model 75 (50 to 75 GHz / WR-15 waveguide input)
19. Model 90 (60 to 90 GHz / WR-12 waveguide input)
20. Model 120 (75 to 120 GHz / WR-10 waveguide input)
21. Model 140(90 to 140 GHz / WR-8 waveguide input)
22. Model 170 (110 to 170 GHz / WR-6 waveguide input)
23. Model 220 (140 to 220 GHz / WR-5 waveguide input)
24. Model 325 (220 to 325 GHz / WR-3 waveguide input)
25. Calibration Substrates (for probe tip calibration - available in 9 standard models)
26. Differential Calibration Substrates(for two, three or four port probe tip calibrations)

DC Probe:

Application Direction: DC Testing

27. T-4 Series Tungsten Probe Tips(A small diameter Tungsten wire attached to a larger wire body)
28. ST-Series Solid Tungsten Probe Tips (A large diameter solid Tungsten shaft precision tapered to a durable point)