

Cascade

DCP-100

DC Probe Holder

000111100010

Overview

The DCP-100 series probe holder delivers the measurement accuracy needed for advanced on-wafer process and device characterization, as well as reliability testing. With superior guarding and shielding, DCP-100 series probe overcomes the performance limitations of non-coaxial needle probes.

For full-triaxial current/voltage measurements using combined signal, guard and shield cables, the DCP-100 probe should be used with FormFactor's probing systems with MicroChamber®. The MicroChamber system provides full-EMI shielding around the wafer chuck and the probes, offering a fully-shielded, guarded, dark measurement environment. The triaxial connections from DC parametric semiconductor test instruments are then extended to the probe tip.

Features and Benefits

Low-noise electrical performance

- Ultra-low, fA-level current and fF-level capacitance measurements

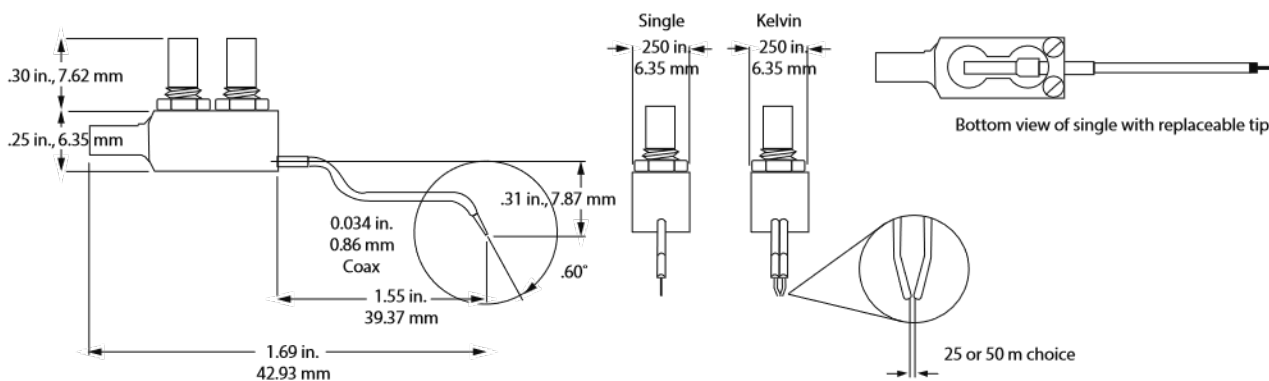
Field-replaceable coaxial probe tips

- Tips can be easily replaced within minutes and guarantee fully-guarded measurements in fA and fF levels

Full-electrical guarding to probe tip

- Enables full utilization of semiconductor parametric instrumentation performance

Physical Dimensions (measurements in mm)



Dimensions for the DCP 100 Probe Holder.

➤ Mechanical Specifications

Breakdown voltage	>500 V
Isolation resistance	>1 x 10E13 Ω
Frequency response (3 dB)	150 MHz
Temperature range	-65°C to 150°C
Characteristic impedance	50 Ω
Tip material	Tungsten
Body material	Gold plated
Connector type	SSMC

➤ Applications

Part Number	Description
Probe holders with replaceable tips	
DCP-105R	DC coaxial probe holder, single, replaceable tip (0.5 μm radius)
DCP-115R	DC coaxial probe holder, single, replaceable tip (1.5 μm radius)
DCP-150R	DC coaxial probe holder, single, replaceable tip (5.0 μm radius)
DCP-150GPR-50	DC coaxial probe holder, with ground needle (50 μm pitch)
Replaceable probe tips	
107-157	Replacement tips, 1.5 μm tip radius, box of 10
107-158	Replacement tips, 5 μm tip radius, box of 10
107-159	Replacement tips, 0.5 μm tip radius, box of 10
Non-replaceable dual-tip Kelvin coaxial probe tips	
DCP-150K-25	DC coaxial probe, Kelvin, 25 μm pitch, 5.0 μm radius tip
DCP-150K-50	DC coaxial probe, Kelvin, 50 μm pitch, 5.0 μm radius tip

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