

Cascade

DCP-100

DC Probe Holder

00011110001

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

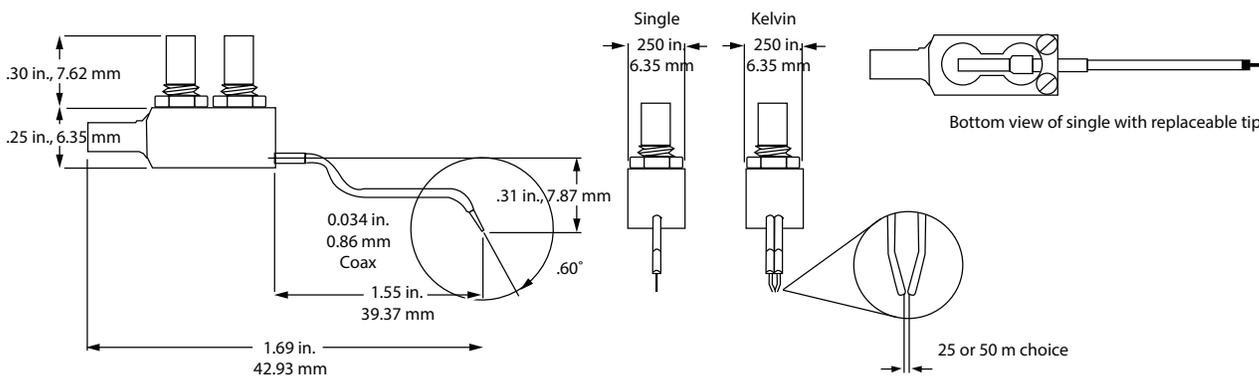
Field-replaceable coaxial probe tips

- 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

© Copyright 2020 FormFactor, Inc. All rights reserved.
FormFactor and the FormFactor logo are trademarks of FormFactor, Inc. All other trademarks are the property of their respective owners.

Corporate Headquarters
7005 Southfront Road
Livermore, CA 94551
Phone: 925-290-4000
www.formfactor.com

All information is subject to change without notice.

DCP100-SS-0620