



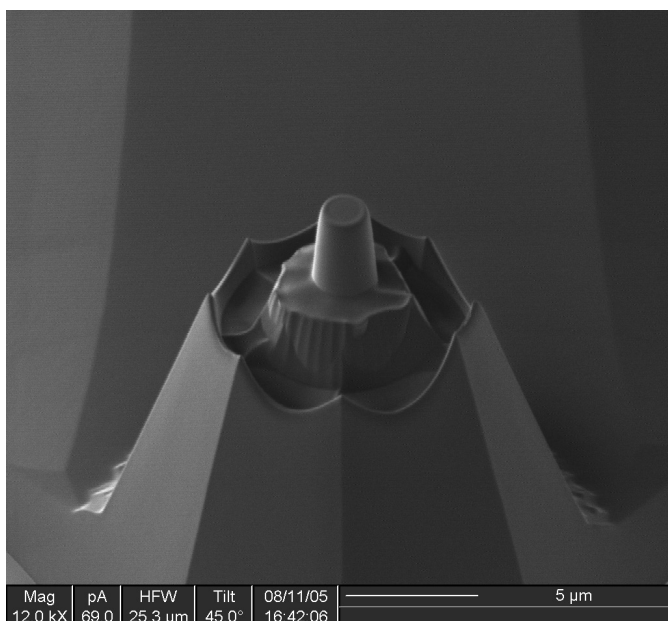
Plateau Tip Series Silicon-SPM-Probes

The Plateau Tip series based on the well-established NANOSENSORS™ Silicon-SPM-Probes exhibit an intentionally blunt tip with a well-defined circular end-face located at the free end of a micromechanical cantilever. This plateau is formed by focused ion beam milling out of a symmetrically etched tip building a rod on top of a conical tip.

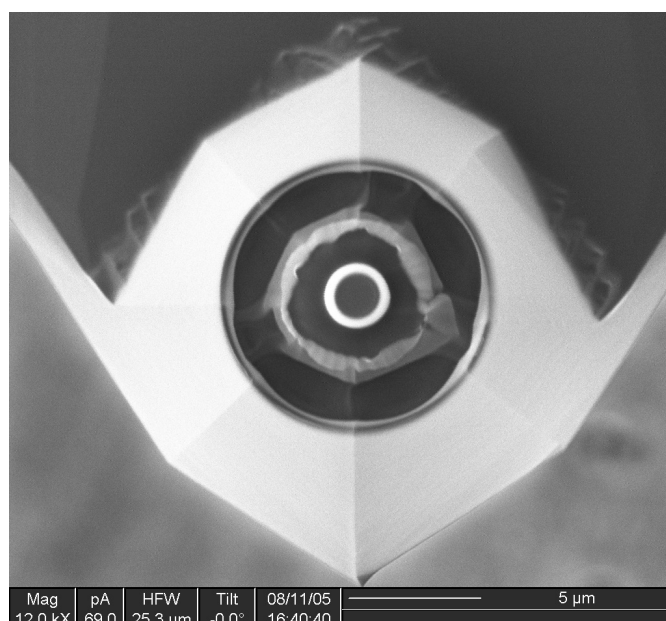
The plateau tips are available on various cantilever geometries covering force constants ranging from 0.2 N/m to 48 N/m and resonance frequencies from 13 kHz to 330 kHz. The diameter of the plateau face can be adjusted between 1.8 μm (standard type) and 10 μm (customized type).

■ Probe Features at a Glance

- Well-defined plateau shape
- Standard type available out of stock
- Customized shape option
- Single crystalline silicon
- Chemical inert
- High mechanical Q-factor for high sensitivity



SEM image of focused ion beam milled Plateau Tip with 1.8 μm diameter (3D-view)



SEM image of focused ion beam milled Plateau Tip with 1.8 μm diameter (top view)



Standard Plateau Shape (PL2)

Plateau tip probes with a plateau diameter of 1.8 μm are routinely fabricated and can be delivered out of stock.

Technical Data	
Plateau diameter* [μm]	1.8
Plateau diameter variation [μm]	± 0.5
Plateau rod height [μm]	>2.0

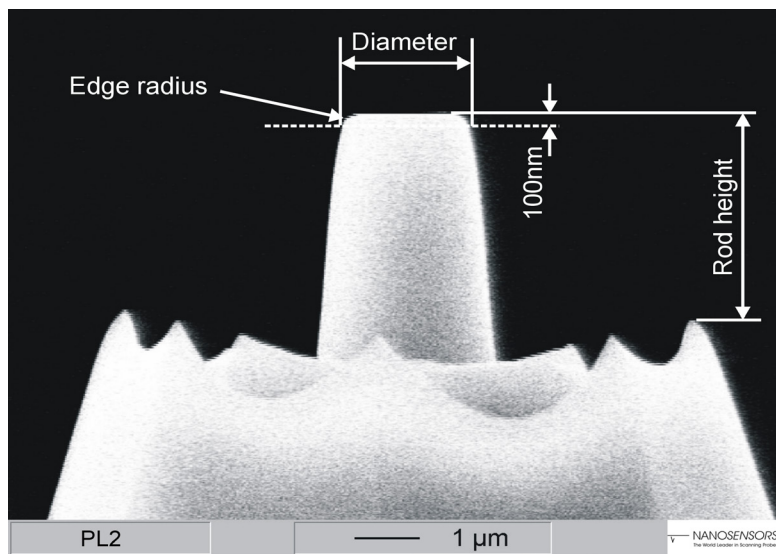
* measured at a distance of 100 nm from the end-face

Customized Plateau Shape (PLC)

Upon request customized larger plateau diameters can be realized. Other shapes are possible upon request.

Technical Data (circular shape)	
Plateau diameter* [μm]	1.8-8.0
Plateau diameter variation [μm]	± 0.5
Plateau rod height [μm]	>2.0

* measured at a distance of 100 nm from the end-face



Definition of rod height and plateau diameter (SEM image with sketched dimension definition)

Product List

	Types without Reflex coating	Types with Reflex coating	Application	Force Constant [N/m] (nominal)	Resonance Frequency [kHz] (nominal)
Contact	PL2-CONT PLC-CONT	PL2-CONTR PLC-CONTR	Contact Mode	0.2	13
Non-Contact	PL2-NCH PLC-NCH	PL2-NCHR PLC-NCHR	Non-Contact / Tapping Mode (high frequency)	42	330
	PL2-NCL PLC-NCL	PL2-NCLR PLC-NCLR	Non-Contact / Tapping Mode (long cantilever)	48	190
Special	PL2-FM PLC-FM	PL2-FMR PLC-FMR	Force Modulation Mode	2.8	75

For more details please refer to the product datasheet on our website

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Plateau_v12