HQ:NSC14/Pt

Conductive Soft Tapping Mode AFM Probe

image of MikroMasch soft tapping FM probe

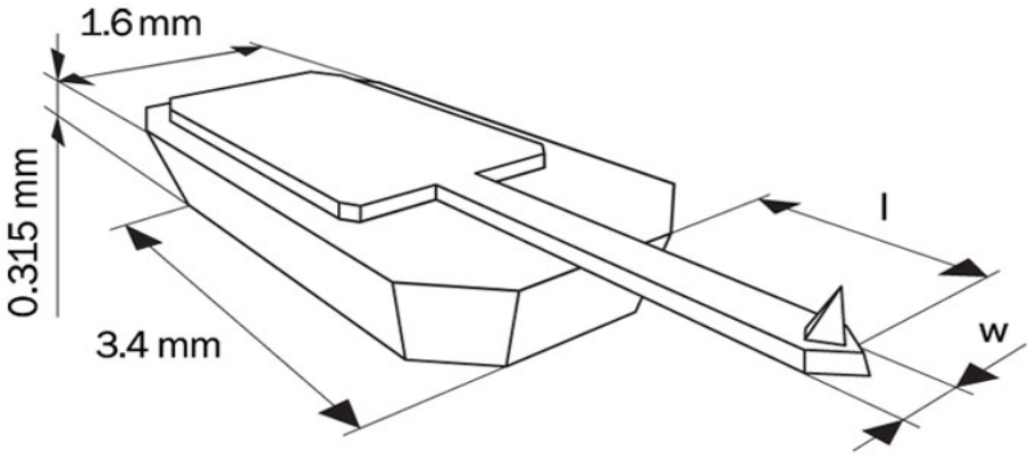
AFM probes of the HQ:NSC14 series are generally used in tapping mode for ples to obtain better phase contrast and reduce surface deformations caused by the tapping AFM tip.

The HQ AFM probes offer high consistency of the AFM tip radius, the AFM cantilever reflectivity and the quality factor.

The overall 30 nm platinum coating is electrically conductive and chemically inert. It also enhances the laser reflectivity of the AFM cantilever. The resulting coated AFM tip radius is below 30 nm.

Coating

Electrically Conductive



AFM Probe Specifications

AFM Tip

SHAPE	HEIGHT	FULL CONE ANGLE	RADIUS
Rotated	15 µm (12 – 18 µm)*	40°	< 30 nm

AFM Cantilever

CANTILEVER	SHAPE	FORCE CONST.	RES. FREQ.	LENGTH	WIDTH	THICKNESS
Cantilever A	Beam	5 N/m (1.8 – 13 N/m)*	160 kHz (110 – 220 kHz)*	125 µm (1 – 130µm)*	25 µm (22 – 28µm)*	2.1µm (1.6 – 2.6 µm)*

* typical values