HQ:CSC17/Cr-Au

Gold Coated Contact Mode AFM Probe

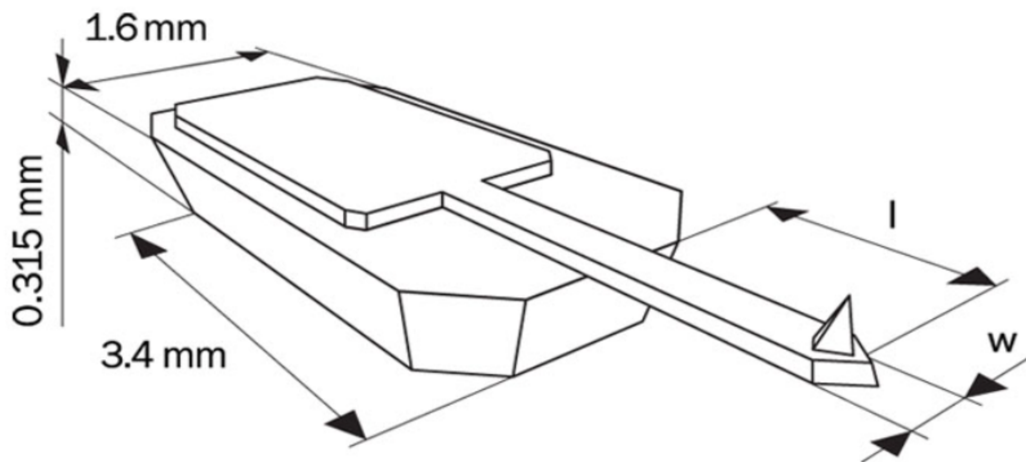
AFM probes of the HQ:CSC17 series have AFM cantilevers with low force constants that offer high sensitivity in contact mode AFM. These AFM probes are also used for Lateral Force Microscopy.

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

The overall 30 nm Au coating with 20 nm Cr sublayer is electrically conductive and chemically inert. It also ehnances the laser reflectivity of the AFM cantilever in air and liquids. The resulting coated AFM tip radius is below 35 nm. The coating may cause AFM cantilever bending up to 3°.

Coating

Gold Overall



AFM Probe Specifications

AFM Tip

SHAPE	HEIGHT	FULL CONE ANGLE	RADIUS
Rotated	15 µm (12 – 18 µm)*	40°	< 35 nm

AFM Cantilever

CANTILEVER	SHAPE	FORCE CONST.	RES. FREQ.	LENGTH	WIDTH	THICKNESS
Cantilever A	Beam	0.18 N/m (0.06 – 0.4 N/m)*	13 kHz (10 – 17 kHz)*	450 µm (1 – 455µm)*	50 µm (47 – 53µm)*	2µm (1.5 – 2.5 µm)*

* typical values