

# HQ:XSC11/No Al

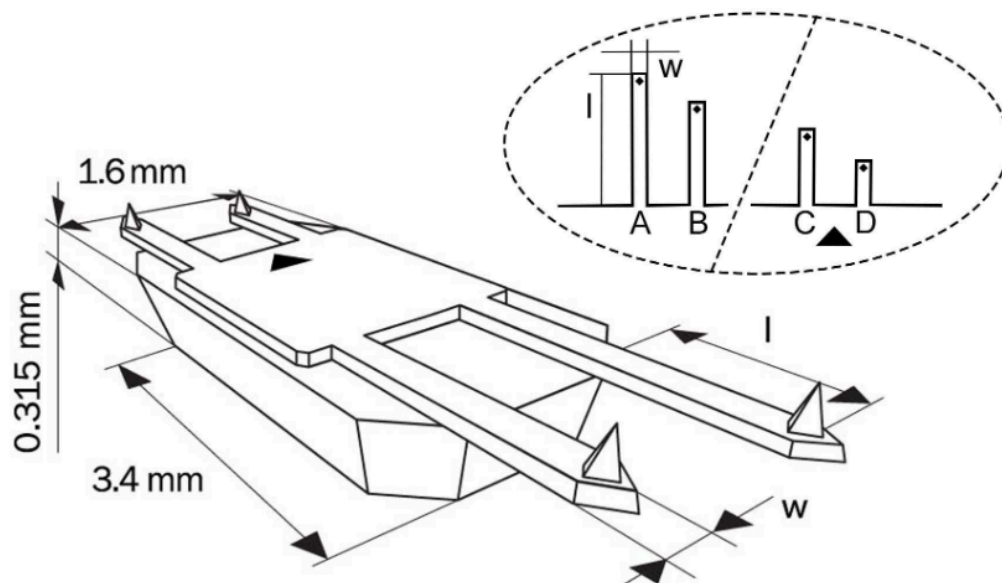
## AFM Probe with 4 Different Cantilevers for Various Applications

AFM probes of the HQ:XSC11 series have four different AFM cantilevers, two on each side of the holder chip. They can be used in various applications.

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

### Coating

none



## AFM Probe Specifications

### AFM Tip

SHAPE	HEIGHT	FULL CONE ANGLE	RADIUS
Rotated	15 $\mu\text{m}$ (12 – 18 $\mu\text{m}$ )*	40°	< 8 nm

### AFM Cantilever

CANTILEVER	SHAPE	FORCE CONST.	RES. FREQ.	LENGTH	WIDTH	THICKNESS
Cantilever A	Beam	0.2 N/m (0.1 – 0.4 N/m)*	15 kHz (12 – 18 kHz)*	500 $\mu\text{m}$ (1 – 505 $\mu\text{m}$ )*	30 $\mu\text{m}$ (27 – 33 $\mu\text{m}$ )*	2.7 $\mu\text{m}$ (2.2 – 3.2 $\mu\text{m}$ )*
Cantilever B	Beam	2.7 N/m (1.1 – 5.6 N/m)*	80 kHz (60 – 100 kHz)*	210 $\mu\text{m}$ (1 – 215 $\mu\text{m}$ )*	30 $\mu\text{m}$ (27 – 33 $\mu\text{m}$ )*	2.7 $\mu\text{m}$ (2.2 – 3.2 $\mu\text{m}$ )*
Cantilever C	Beam	7 N/m (3 – 16 N/m)*	155 kHz (115 – 200 kHz)*	150 $\mu\text{m}$ (1 – 155 $\mu\text{m}$ )*	30 $\mu\text{m}$ (27 – 33 $\mu\text{m}$ )*	2.7 $\mu\text{m}$ (2.2 – 3.2 $\mu\text{m}$ )*
Cantilever D	Beam	42 N/m (17 – 90 N/m)*	350 kHz (250 – 465 kHz)*	100 $\mu\text{m}$ (1 – 105 $\mu\text{m}$ )*	50 $\mu\text{m}$ (47 – 53 $\mu\text{m}$ )*	2.7 $\mu\text{m}$ (2.2 – 3.2 $\mu\text{m}$ )*

\* typical values