

Cantilever Data	Value	Range*
Resonance Frequency	320 kHz	250 - 390 kHz
Force Constant	42 N/m	21 - 78 N/m
Length	125 μm	120 - 130 μm
Mean Width	30 μm	25 - 35 μm
Thickness	4 μm	3.5 - 4.5 μm

NanoWorld® Pointprobe® NCH probes are designed for non-contact or tapping mode imaging. This AFM probe type combines high operation stability with outstanding sensitivity and fast scanning ability.

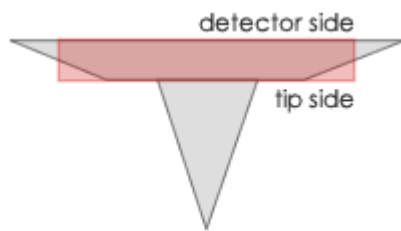
All SPM and AFM probes of the Pointprobe® series are made from monolithic silicon which is highly doped to dissipate static charge. They are chemically inert and offer a high mechanical Q-factor for high sensitivity. The AFM tip is shaped like a polygon based pyramid with a typical height of 10 - 15 μm .

For enhanced resolution of nanostructures and microroughness we have developed an advanced AFM tip manufacturing process leading to unrivalled sharpness of the SuperSharpSilicon™ tip.

This AFM probe offers unique features:

- Typical AFM tip radius of curvature of 2 nm
- Guaranteed AFM tip radius of curvature 5 nm (yield >80%)
- Half cone angle < 10° at the last 200 nm of the AFM tip

For applications requiring lower resonance frequencies or an AFM cantilever length exceeding 125 μm we recommend our Pointprobe® type [SSS-NCL](#).



A trapezoidal cross section of the AFM cantilever and therefore 30% wider (e.g. NCH) AFM cantilever detector side result in easier and faster laser adjustment. Additionally, because there is simply more space to place and reflect the laser beam, a higher SUM signal is reached.

Tip shape: Supersharp

Coating: none

Order Code	Quantity	Data Sheet
SSS-NCH-10	10	yes
SSS-NCH-20	20	yes
SSS-NCH-50	50	no