Cantilever Data	Value	Range*
Resonance Frequency	2000 kHz	700 - 2000 kHz
Force Constant	Info	
Length	35 µm	
Mean Width	42 µm	
Thickness	0.7 µm	0.5 - 0.9 µm

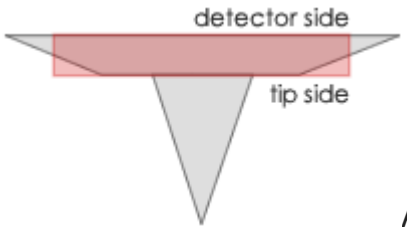
Optimized positioning through maximized tip visibility

NanoWorld® Arrow™ ultra high frequency AFM probes are capable of resonating with a very high frequency of up to 2.0 MHz. This probe type combines outstanding sensitivity with fast scanning ability. All AFM probes of the Arrow™ 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 probes feature a AFM cantilever with a triangular free end and a tetrahedral tip with a typical height of 3 µm.

Additionally, this AFM probe offers an AFM tip radius of curvature of less than 10 nm.

The unique Arrow™ shape with the AFM tip position at the very end of the AFM cantilever allows easy positioning of the AFM tip on the area of interest.

If needed, specific AFM cantilever thicknesses can be selected within very narrow tolerances for an additional fee.



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: Arrow

Coating: Reflective Aluminum

Aluminum Reflex Coating

The aluminum reflex coating consists of a 30 nm thick aluminum layer deposited on the detector side of the AFM cantilever which enhances the reflectance of the laser beam by a factor of 2.5. Furthermore it prevents light from interfering within the AFM cantilever.

Order Code	Quantity	Data Sheet
ARROW-UHF-10	10	Nominal values
ARROW-UHF-20	20	Nominal values