| Cantilever Data     | Value   | Range*        |
|---------------------|---------|---------------|
| Resonance Frequency | 285 kHz | 240 - 380 kHz |
| Force Constant      | 42 N/m  | 27 - 80 N/m   |
| Length              | 160 µm  | 155 - 165 μm  |
| Mean Width          | 45 µm   | 40 - 50 µm    |
| Thickness           | 4.6 µm  | 4.1 - 5.1 μm  |

## Optimized positioning through maximized AFM tip visibility

NanoWorld® Arrow<sup>™</sup> NC 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 Arrow<sup>™</sup> 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. These AFM probes feature a rectangular AFM cantilever with a triangular free end and a tetrahedral AFM tip with a typical height of 10 - 15 µm.

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

## The unique Arrow<sup>™</sup> 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.



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: none

| Order Code  | Quantity | Data Sheet     |
|-------------|----------|----------------|
| ARROW-NC-10 | 10       | Nominal values |
| ARROW-NC-20 | 20       | Nominal values |
| ARROW-NC-50 | 50       | Nominal values |
| ARROW-NC-W  | 380      | Nominal values |