

AFM Probe Specifications:

Coating

Reflective Gold

Additional Info

The 240AC-FG AFM probes with carbon nanofibers at the end of the silicon AFM tips are designed for soft tapping mode AFM imaging of deep trenches. The typical fiber radius of curvature is 10 nm and the diameter is 50 nm at a height of 200 nm away from the apex.

The tetrahedral AFM tip is located precisely at the free end of the AFM cantilever. This allows the AFM tip to be positioned accurately over the area of interest on the sample surface.

The gold coating ensures high and stable laser reflectivity in air, vacuum and liquids. Please note that while the tetrahedral AFM tip and the AFM tip side of the AFM cantilever are gold coated, the diamond-like spike remains uncoated.

AFM Tip:

Shape	Height	Setback	Radius
High-Aspect-Ratio	14 μm (12 - 16 μm)*	0 μm	< 10 nm

* typical values

AFM Cantilever:

Cantilever	Shape	Force Const.	Res. Freq.	Length	Width	Thickness
High aspect ratio soft tapping mode AFM cantilever	Beam	2 N/m (0.6 - 3.9 N/m)*	70 kHz (45 - 90 kHz)*	240 μm (1 - 250 μm)*	40 μm (38 - 42 μm)*	2.6 μm (2.1 - 3.1 μm)*

* typical values