Tap150DLC

AFM Tip

SHAPE	HEIGHT	SETBACK	RADIUS	HALF CONE ANGLE
Rotated	17 μm (15 – 19 μm)*	15 μm (10 – 20 μm)*	15 nm	$20^{\circ}25^{\circ}$ along cantilever axis, $25^{\circ}30^{\circ}$ from side, 10° at the apex

AFM Cantilever

Shape Beam Force Constant 5 N/m (1.5 – 15 N/m)* Resonance Frequency 150 kHz (75 – 225 kHz)* Length 125 μm (115 – 135 μm)* Width 25 μm (20 – 30 μm)* Thickness 2.1 μm (1.1 – 3.1 μm)*	Cantilever A	
Resonance Frequency 150 kHz (75 – 225 kHz)* Length 125 μm (115 – 135 μm)* Width 25 μm (20 – 30 μm)*	Shape	Beam
Length 125 μm (115 – 135 μm)* Width 25 μm (20 – 30 μm)*	Force Constant	5 N/m (1.5 – 15 N/m)*
Width 25 μm (20 – 30 μm)*	Resonance Frequency	150 kHz (75 – 225 kHz)*
	Length	125 μm (115 – 135 μm)*
Thickness 2.1 μm (1.1 – 3.1 μm)*	Width	25 μm (20 – 30 μm)*
	Thickness	2.1 µm (1.1 – 3.1 µm)*

^{*} typical range

Coating

Diamond-Like-Carbon coating on tip side of the cantilever, 15nm thick; Aluminum coating on detector side of the cantilever, 30 nm thick

Alignment Grooves

This product features alignment grooves on the back side of the holder chip.

Additional Info

Monolithic silicon AFM probe for soft tapping mode operation.

High durability and hydrophobicity due to Diamond-Like-Carbon coating on tip side of the AFM cantilever

The rotated AFM tip allows for more symmetric representation of high sample features. The consistent AFM tip radius ensures good resolution and reproducibility.

The AFM holder chip fits most commercial AFM systems as it is industry standard size.