

## CT300 - Conical Tapping Mode

Conical Probe for Tapping mode

### Typical Tip Dimensions

Tip Radius	~ 8 nm (guaranteed < 10 nm)
Tip Style/Geometry	Conical
Tip Height	15 $\mu\text{m}$ $\pm$ 2.5 $\mu\text{m}$
Tip Cone Angle	30 degrees

### Typical Cantilever Properties

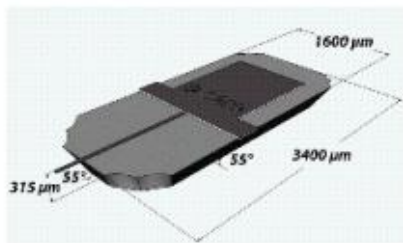
Spring Constant	40 N/m
Resonant Frequency	300 kHz
Length	125 $\mu\text{m}$
Width	42 $\mu\text{m}$
Thickness	3.5 $\mu\text{m}$

Aluminium coating on detector side of cantilever is available.

Please contact us about other coating options.

### Common Properties

Material	single crystal silicon, n-type, highly doped
Cantilevers per chip	one
Cantilever shape	Rectangular
Tip offset	~ 10 $\mu\text{m}$
Tip Aspect Ratio	1.5:1
Chip Dimensions	3.4 mm x 1.6 mm x 315 $\mu\text{m}$
Alignment Grooves	Yes



### Cantilever Specification

Spring Constant	40 N/m	Range: 20 - 95
Resonant Frequency	300 kHz	Range: 208 - 392
Length	125 $\mu\text{m}$	Range: 115 - 135
Width	42 $\mu\text{m}$	Range: 40 - 45
Thickness	3.5 $\mu\text{m}$	Range: 2.5 - 4.5

Team Nanotec guarantees 80 % of it's Aspire-Probes meet the specifications.

ReflexCoating:	Al-reflex, None
Quantity:	Qty 10, Qty 25, Qty 100, Qty 250, Qty 400