

## Super Sharp Improved Super Cone

Super sharp tip for tapping or non contact mode.

Application example: surface roughness measurements

### Tip Apex Specifications

Radius:	< 5 nm
Full cone angle:	< 5° for ~ 150 nm
Tip height:	> 9 µm

### Available Cantilevers:

C = 40 N/m, fo = 300 kHz
C = 3.0 N/m, fo = 75 kHz
C = 0.7 N/m, fo = 45 kHz
C = 0.2 N/m, fo = 15 kHz

1 pack includes 5 probe-tips

Probe tips, cantilevers, and cantilever chips consist of single crystal silicon.

### Tip Apex Specifications

Radius:	< 5 nm
Full cone angle:	< 5° for ~ 150 nm

Tip height:	> 9 $\mu\text{m}$
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All cantilevers are shipped with Al-reflex coating (R).

The SS-ISC probes are also available with alignment grooves on the back side of the holder chip.

Shipments without reflex coating or with special coatings upon request.

All probe tips are SEM quality inspected prior to shipment.

#### Cantilever Dimensions:

Stiffness	Typical resonant frequency	Length	Width
0.2 N/m	15 kHz	450 ( $\pm$ 15 $\mu\text{m}$ )	35 ( $\pm$ 3) $\mu\text{m}$
0.7 N/m	45 kHz	225 ( $\pm$ 15) $\mu\text{m}$	35 ( $\pm$ 3) $\mu\text{m}$
3.0 N/m	75 kHz	225 ( $\pm$ 15) $\mu\text{m}$	35 ( $\pm$ 3) $\mu\text{m}$
40 N/m	300 kHz	125 ( $\pm$ 15) $\mu\text{m}$	35 ( $\pm$ 3) $\mu\text{m}$

#### Holder chip dimensions:

Length	3.40 mm
Width	1.55 mm
Thickness	0.315 mm

SS-ISC Lever:  $C = 40 \text{ N/m}$ ,  $C = 3.0 \text{ N/m}$ ,  $C = 0.7 \text{ N/m}$ ,  $C = 0.2 \text{ N/m}$

ReflexCoating: Al-reflex, None