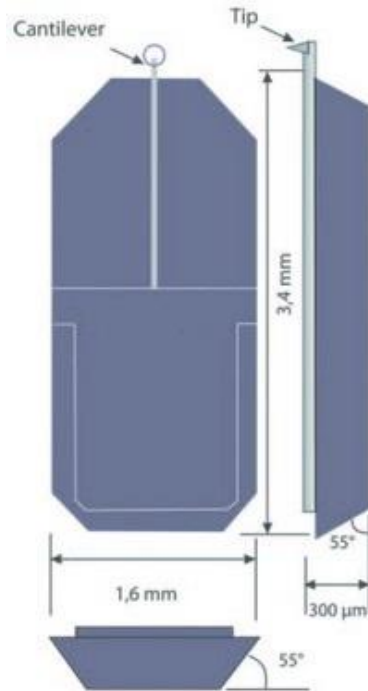


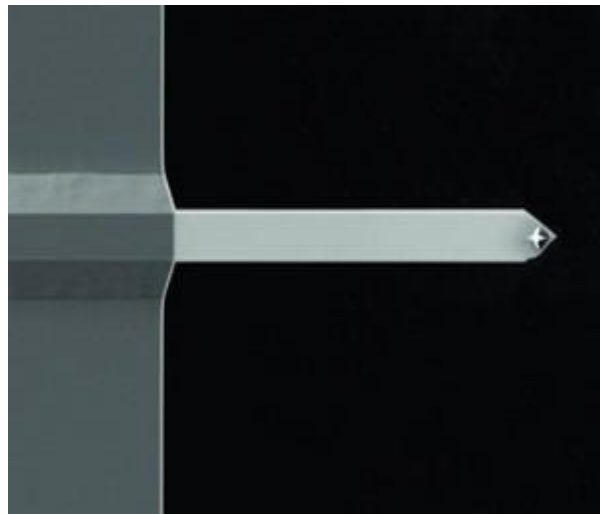
Substrate

- Standard chip size: 1.6x3.4x0.3 mm.
- Cross-section is trapezium-shape.
- High reflective chemically stable Au back side coating (reflectivity is 3 times better in comparison with uncoated probes).
- Compatible with the most of commercial AFM devices.
- The base silicon is highly doped to avoid electrostatic charges.



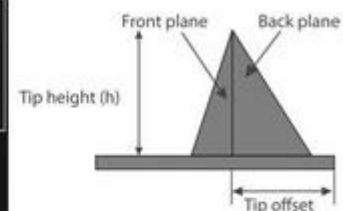
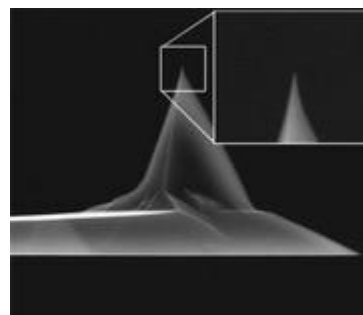
Cantilever

- Rectangular shape.
- Cross-section is trapezium-shape.
- Backside width is given in probes specifications.
- Available for contact, semicontact and noncontact modes.
- Tip is set on the controlled distance 5-20mm from the free cantilever end.

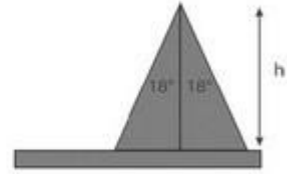
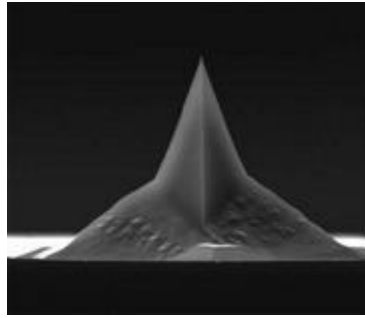


Tip

- Total tip shape is tetrahedral, the last 500nm from tip apex is cylindrical.
- Tip height: 14 – 16 nm.
- Typical curvature radius:
 - of uncoated tips 6 nm, guaranteed 10nm;
 - of coated tips 35nm.
- Tip offset: 5 - 20 nm.
- Tip aspect ratio: 3:1 – 7:1.
- Front plane angle: $10^\circ \pm 2^\circ$.
- Back plane angle: $30^\circ \pm 2^\circ$.
- Side angle (half): $18^\circ \pm 2^\circ$.
- Cone angle at the apex: $7^\circ - 10^\circ$.



Side View Sketch



Front View Sketch

“Golden” Silicon Probes are available:

- with Au and Al reflective coating
- with PtIr, TiN, Au, diamond doped conductive coating
- with CoCr magnetic coating
- no coated (bare)
- tiplless

Probes are packaged in GelPak® boxes. (GelPak® is a registered trade mark of Vichem Corporation)

Guaranteed product yield is better than 90%.
Available cantilever bent angle <2 degrees.

Warranty: 1 year for uncoated probes and probes with reflective coating
6 months for probes with conductive coating
3 months for probes with magnetic coating