| Cantilever Data* | Cant. 1 | Cant. 2 |
|---|---|---|
| Shape | Beam | |
| Resonance Frequency | 67 kHz | 17 kHz |
| Force Constant | 0.48 N/m | 0.06 N/m |
| Length | 100 µm | 200 µm |
| Mean Width | 40 µm | 40 µm |
| Thickness | 500 nm | 500 nm |

# Product Description

## Leading edge in sharpness and durability

The Pyrex-Nitride AFM probes have silicon nitride AFM cantilevers with very low force constants and integrated oxide sharpened, pyramidal AFM tips with a height of 3.5 µm. The AFM tip is located 4µm behind the free end of the AFM cantilever. This AFM probe series features a support chip that is made of Pyrex. Two chip versions are available: The DB series with rectangular / diving board AFM cantilevers and the TR series having triangular AFM cantilevers.

All chips are pre-separated prior to shipment and come in Gel-Pak containers.

The typical AFM tip radius of curvature of is below 10 nm.

Tip shape: Pyramid
Coating: Reflective Gold

### Gold Reflex Coating

The gold reflex coating consists of a 70 nm thick gold layer deposited on the detector side of the AFM cantilevers which enhances the reflectance of the laser beam. Furthermore it prevents light from interfering within the AFM cantilever.

As the coating is almost stress-free the bending of the AFM cantilevers due to stress is less than 2 degrees.

| Order Code | Quantity | Data Sheet |
|---|---|---|
| PNP-DB-20 | 20 | yes |
| PNP-DB-50 | 50 | yes |