

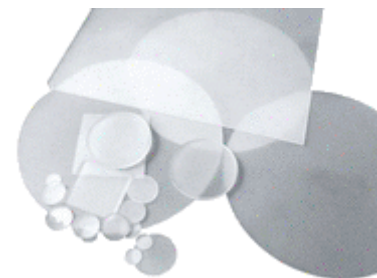
Quartz blanks

Typical application

For production of quartz crystal units, quartz crystal filters, piezoelectric transducers and for other applications.

Features

- made from quartz crystal
- diameter from 4.0 up to 20 mm or even more
- blank surface can be fine lapped, chemically etched or polished
- cut angles: family of AT-cuts, BT-cut, CT-cut, DT-cut, X-cut and Y-cut
- thickness of blanks can be from 0.040 up to 1.0 mm or more
- for AT, BT, X and Y cuts the thickness can be specified by resonant frequency and tolerance
- blanks shape can be plan-parallel (unbevelled or bevelled), plan-convex or bi-convex
- they can be delivered as unplated or plated with metal electrodes



Typical parameters of Quartz Blanks

| Parameter | Minimal | Maximal |
|---------------------|--|--------------------|
| Diameter [mm] | 4.0 ± 0.02 | 20.0 ± 0.02 |
| Thickness [mm] | 0.04 ± 0.001 | 1.0 or more |
| Cut angle tolerance | ± 15" (for AT-cut) | ± 30' |
| Surface roughness | polished | customer specified |
| X-axis marking | for Y-rotated cuts by small flat or customer specified | |

Differences from standard values and other parameters can be consulted.

Synthetic Quartz material specification (according EN/IEC 60758:2004, Ed.3):

- Quality grade: Grade C (standard), Grade B, Grade A (according customer specification)
- Inclusion density: Grade Ib (standard) or better (according customer specification)
- Etch channel density: Grade 3 (standard) or better (according customer specification)

Typical shapes of AT-quartz blank

