

KTA Crystal

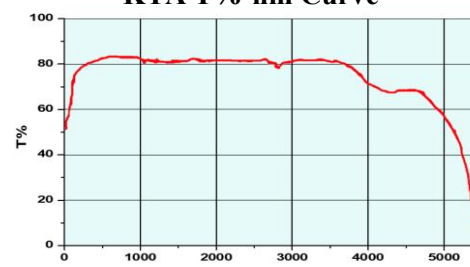
KTiOAsO₄ (KTA) is an excellent NLO crystal for OPO. KTA exhibits extremely high damage thresholds and larger NLO and electro-optical coefficients than KTP. In addition, it has the characteristics of wide angle and temperature bandwidth, low dielectric constant, and a sharp decrease in absorption between 2.0-5.0 μm in the band.

Main features:

- Large EO coefficient and considerable NLO coefficient
- High damage threshold, Wide temperature and spectral range
- Withstands higher power density
- Low dielectric constant ion conductivity (much smaller than KTP)
- Less absorption in the 3.0-4.0 μm band
- Wide reception angle and small walk-away angle



KTA T%-nm Curve



Standard Products

Model	Size (mm)	θ (°)	Φ (°)	Coating
KTP 501	3 × 3 × 5	90	23.5	AR/AR @ 1064+532 nm
KTP 502	3 × 3 × 10	90	23.5	AR/AR @ 1064+532 nm
KTP 503	4 × 4 × 6	90	23.5	AR/AR @ 1064+532 nm
KTP 504	7 × 7 × 9	90	23.5	AR/AR @ 1064+532 nm

Typical applications:

- OPO
- Frequency multiplier (SHG @ 1083-3789 nm)
- Optical waveguide photoelectric Q switch and modulation
- Sum and differential frequency generation (SFG)/(DFG)
- OPA & OPO

For more information about products click on: www.voyawave.com

Technical Parameters

Names of Parameters	Values and Ranges
Size tolerance	±0.1 mm
Dimension tolerance	≤ 0.2°
Clear aperture	> 90%
Surface quality	10/5 膜后 20/10
Flatness	< λ/8 @ 633 nm
Wavefront distortion	< λ/4 @ 633 nm
Parallelism	< 20 arc sec
Perpendicularity	< 10 arc min
Coating	According to customer requirements
Quality warranty period	1 year (under normal use)

See appendix P31 for more information