



KTA

Potassium Titanyle Arsenate - KTiOAsO_4

MAIN FEATURES

- Transparent between 0.5 μm and 3.5 μm
- High non-linear optical efficiency
- Broad temperature acceptance

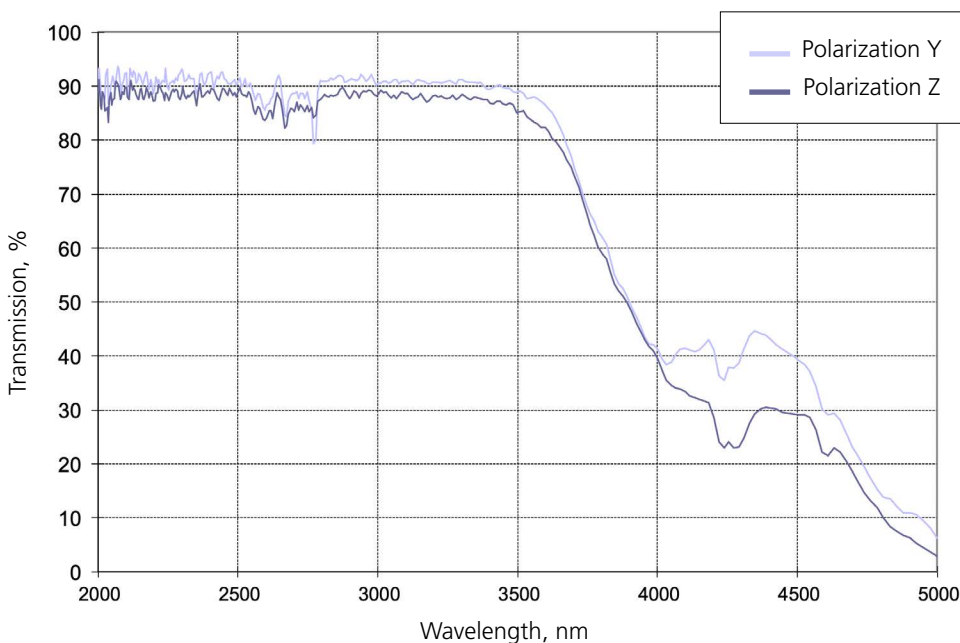
APPLICATIONS

- Mid-high average power eye-safe lasers
- High average power OPA in the mid-IR for high order harmonics
- Spectroscopy and gas detection

WHAT MAKES US DIFFERENT?

- Excellent optical and non-linear optical homogeneity
- Low absorption of AR-coatings in the 3 μm range
- High damage threshold of bulk and coatings
- Available in cross-section up to 20x20mm² and up to 20mm in length

TECHNICAL HIGHLIGHTS



Transmission curve between 2 μm and 5 μm :

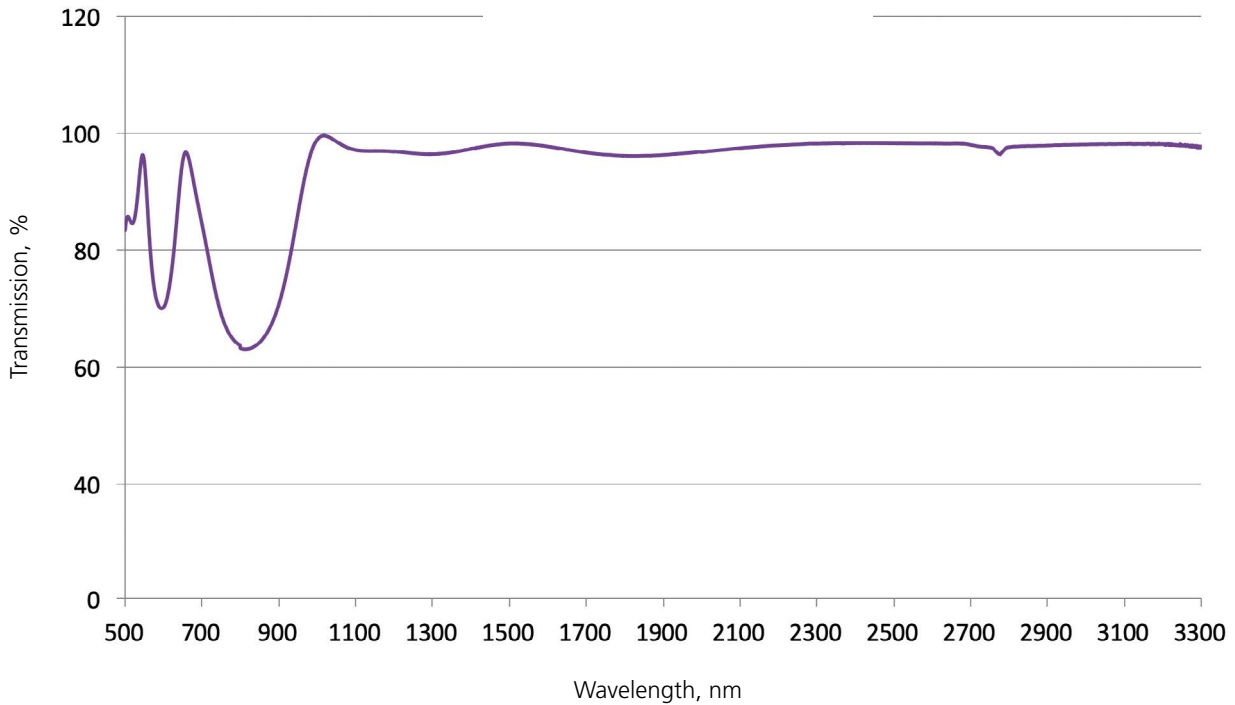
Uncoated KTA crystal of 5x5x17mm (X-cut) - Cristal Laser

no transmission losses between 3.0 μm and 3.5 μm

TECHNICAL HIGHLIGHTS

Transmission of our low absorption AR-coating on KTA parts:
R<5% over 1.0µm-4.0µm

KTA 10x10x1 CT16037



SPECIFICATIONS

Aperture	Up to 15x15mm ²
Length	Up to 20mm
Flatness	<λ/10 @633nm
Wavefront distortion	<λ/8 @633nm
Parallelism	Down to 5"
Roughness	10Å RMS or better
Scratch and dig	<2/1
Bulk absorption	<200 ppm/cm@1064nm
Damage threshold	>10J/cm ² @1064nm, 10ns 10Hz