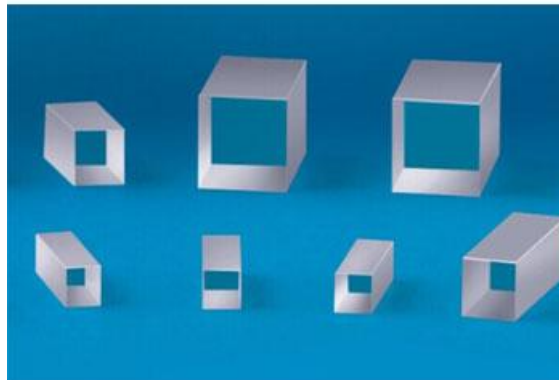


HGTR KTP crystals

Gray track damage is a serious damage for KTP crystals, the conventional flux-grown KTP crystal is susceptible to the gray track damage, the hydrothermal-grown KTP has high damage threshold and high ability to anti gray track. It is extremely suitable for laser system applications requiring high power, high efficiency and/or durability where regular flux-grown KTP crystals will suffer from gray track damage. Hangzhou Shalom EO offers the anti-gray track KTP crystals (HGTR-KTP) with excellent properties

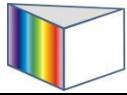


Features

- High gray track resistance
- High damage threshold: $>2\text{GW}/\text{cm}^2$ (@1064nm; TEM00, 10nS,10Hz)
- High conversion efficiency upto 80%
- Low absorption: $<2000\text{ppm}/\text{cm}$ @532nm; $<150\text{ppm}/\text{cm}$ @1064nm;
- Low electrical conductivity: about 10^{-10} Ohm.cm
- Single domain crystals structure

Applications

- Second harmonic generation for frequency doubling
- Optical parametric oscillator (OPO)
- Electro-optic pockels cells
- Quasi phase matching



SPECIFICATIONS

Specifications of HGTR-KTP crystals	
Materials	HGTR-KTP crystals
Dimension tolerance	(W±0.1mm)x(H±0.1mm)x(L+0.5/-0.1mm)
Size range	Aperture:~10x10mm; Length: ~15mm
Clear aperture	central 90% or the diameter
Scattering of crystals	No visible scattering paths or centers when inspected by a 50mW green Laser
Flatness	less than $\lambda/8$ @ 633nm
Transmitting wavefront distortion	less than $\lambda/8$ @ 633nm
Chamfer	$\leq 0.2\text{mm} \times 45^\circ$
Chip	$\leq 0.1\text{mm}$
Surface Quality	better than 10/5 S/D (MIL-PRF-13830B)
Parallelism	≤ 20 arc seconds
Perpendicularity	≤ 5 arc minutes
Angle tolerance	$\leq 0.25^\circ$
Coating	AR/AR@1064nm +532nm; R<0.2%@1064nm and R<0.5%@532nm
Quality Warranty Period	one year under proper use

Note: The HGTR KTP with other specification is available upon customer's request.