

KTP CRYSTALS

Potassium Titanium Oxide Phosphate (KTiOPO₄), or KTP, is an efficient nonlinear optical crystal in the visible to infrared spectral region with relatively low cost.



Specification	
Dimension	1×1×0.05 - 30×30×40mm
Phase Matching Type	Type II, $\theta=90^\circ$; φ =phase-matching angle
Typical Coating	a) S1&S2: AR @1064nm R<0.1%; AR @ 532nm, R<0.25%. b) S1: HR @1064nm, R>99.8%; HT @808nm, T>5% S2: AR @1064nm, R<0.1%; AR @532nm, R<0.25% Customized coating available upon customer request.
Angle Tolerance	6' $\Delta\theta < \pm 0.5^\circ$; $\Delta\varphi < \pm 0.5^\circ$
Dimension Tolerance	$\pm 0.02 - 0.1 \text{ mm} [W \pm 0.1\text{mm}] \times [H \pm 0.1\text{mm}] \times [L + 0.2\text{mm}/-0.1\text{mm}]$
Flatness	$\lambda/8 @ 633\text{nm}$
Scratch/Dig Code	10 / 5
Parallelism	<10 arc seconds
Perpendicularity	<5 arc minutes
Wavefront Distortion	less than $\lambda/8 @ 633\text{nm}$
Clear Aperture	90% central area
Working Temperature	25°C - 80°C
Homogeneity	$dn \sim 10^{-6}/\text{cm}$