

KDP & DKDP

Potassium Dihydrogen Phosphate (KDP) and Potassium Deuterium Phosphate (KD*P) are among the most widely-used commercial NLO materials. They are commonly used for doubling, tripling and quadrupling of Nd:YAG laser at the room temperature. In addition, they are also excellent electro-optic crystals with high electro-optic coefficients, widely used as electro-optical modulators, Q-switches, and Pockels Cells, etc.



ADVANTAGES :

- Good UV transmission
- High optical damage threshold
- High birefringence
- High nonlinear coefficients

APPLICATIONS :

- Laser frequency conversion — harmonic generation for high pulse energy,
- Electro-optical modulation
- Q-switching crystal for Pockels cells

SPECIFICATIONS :

Flatness	$\lambda/8$ at 633nm
Parallelism	≤ 20 arcsec
Wavefront Distortion	$\lambda/8$ at 633nm
Surface Quality	20-10
Perpendicularity	≤ 5 arcmin
Angle tolerance	$\leq \pm 0.25^\circ$
Dimension tolerance	± 0.1 mm
Clear Aperture	90% of central area
Chamfer	≤ 0.2 mm $\times 45^\circ$
Chip	≤ 0.1 mm
Damage Threshold	1GW/cm ² 1064nm 10ns 10Hz for DKDP