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	λ/8 at 633nm
Parallelism	≤20 arcsec
Wavefront Distortion	λ/8 at 633nm
Surface Quality	20-10
Perpendicularity	≤5 arcmin
Angle tolerance	≤± 0.25°
Dimension tolerance	± 0.1mm
Clear Aperture	90% of central area
Chamfer	≤0.2mmx45°
Chip	≤0.1mm
Damage Threshold	1GW/cm2 1064nm 10ns 10Hz for DKDP