

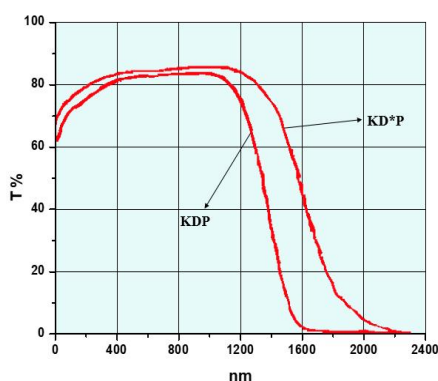
KDP & KD*P Crystal

The nonlinear coefficients of KH_2PO_4 (KDP) and KD_2PO_4 (KD*P) are low. The characteristics of KDP & KD*P crystals are excellent UV transmission range, high damage threshold, high birefringence coefficient, etc. These crystals are widely used in high-tech fields such as laser frequency conversion, EO modulation, and optical fast switching. They are preferred materials for high-power laser systems. In addition, they have a high EO coefficient, so they are also used to make photoelectric Q switches and pockle cells.

Main features:

- No refractive light damage
- High anti-laser threshold
- High birefringence coefficient, superior EO coefficient
- Compact design for easy adjustment
- Good environmental tolerance

KDP & KD*P T%-nm Curves



Typical applications:

- High power laser inverter material
- EO modulation, laser Q switch
- Double-, triple-, and quad-octave devices for Nd:YAG lasers
- Nd: YLF laser

Standard Products

Model	Size (mm)	θ ($^\circ$)	Φ ($^\circ$)	Coating
KDP 901	12 × 12 × 5	76.5	45	AR/AR @ 532/266 nm
KDP 902	15 × 15 × 7	76.5	45	AR/AR @ 532/266 nm
KD*P 201	15 × 15 × 13	36.5	0	AR/AR @ 1064+532 nm
KD*P 202	15 × 15 × 13	53.5	0	AR/AR @ 1064+532 nm
KD*P 203	12 × 12 × 20	59.3	0	AR/AR @ 1064+532/355 nm

Note: KDP & KD*P is easy to deliquesce, Please use & store in a dry
For more information about products click on: www.voyawave.com

Technical Parameters

Names of Parameters	Values & Ranges
Size tolerance	±0.1 mm
Dimension tolerance	< ±0.2°
Clear aperture	> 90%
Surface quality	20/10
Flatness	< $\lambda/8$ @ 633 nm
Wavefront distortion	< $\lambda/8$ @ 633 nm
Parallelism	< 20 h
Perpendicularity	< 5 arc min
Coating	According to customer requirements
Size tolerance	1 year (under normal use)

See appendix P32 for more information