DKDP (KD_2PO_4) Pockels Cells

KD_2PO_4 Pockels Cellsis a kind of optical device with better comprehensive performance. DKDP Pockels Cells has the advantages of good electro-optic performance, low optical loss, high extinction ratio and good environmental tolerance.

DKDP Pockels Cells can be used in high-speed camera switch, electro-optical Q-switch, military aviation laser system, double, triple frequency of dye laser @800 nm and double, triple, quadruple frequency @1064 nm and other related fields. Because DKDP crystal is easy to deliquesce and its poor mechanical properties, it should be used in the following environment: temperature range: 10~50 ° , temperature change not exceeding 5℃per 20 arc min, the ambient humidity less than 40%, and try to use it with humidity control device (such as drying utensils and desiccant). Please store in the drying box when not in use.

Main features:

- Superior electro-optical coefficient and high anti-light damage threshold
- No static birefringence, dull refringence damage
- Compact design for easy adjustment
- High contrast and transmittance
- Good tolerance to the environment

Typical applications:

- Military and aviation laser systems
- Laser cavity dumping and pulse picking
- High speed camera switch, electro-optical Q switch

Technical Parameters

Parameters	Values & Ranges
Insertion loss	< 0.2%
Wavefront distortion	< λ/6 @633nm
Voltage extinction ratio	> 2000:1(cp) > 1500:1(cp)
Collimation	< 0.5°
Quarter-wave voltage	~ 3400 V
Finish	20/10
Capacitance	6 ~ 10 pF
Clear aperture	≥ 90%
Coating	AR @1064nm(R< 0.2%) or upon customers' requirements
Damage threshold	1GW/cm² @1064nm 10ns 10Hz

Refer to Appendix P40 for more optical characteristics