DKDP Pockels Cells

DKDP electro-optic Q-switches (Q-switch, Pockels Cells) are widely used in large-caliber, high-power, narrow-pulse (<10ns) laser systems due to their unique physical properties and excellent optical quality.

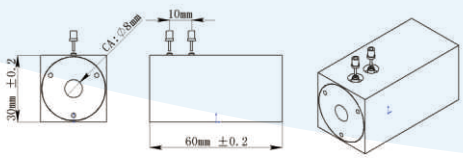
The DKDP crystal is a uniaxial crystal with excellent optical quality with an extinction ratio of >2000:1 (measured using a 632 nm He-Ne laser) with a wave front distortion of 98%. The DKDP electro-optic Q-switching capacitor is small (about 3-5pF), so the rise time is short (<0.5ns), and a narrow pulse width pulse laser can be output during Q-switching. Compared with the widely used electro-optic crystals on the market, DKDP crystals have higher damage thresholds; the damage threshold is >1GW/cm2 under optical conditions of 10 ns pulse width, 1064 nm wavelength and repetition frequency 10 Hz.

ADVANTAGES :

- Wave front distortion: low capacitance
- Short rise time: ~3Pf
- High transmittance: >98%
- High damage threshold: >1GW/cm2
- No static birefringence, no photorefractive damage
- Anti-reflective coated quartz window
- Resistant to ambient temperature shock and excellent electro-optic performance

SPECIFICATIONS :

Aperture:	≤50mm
Clear Aperture	≥90%
Extinction Ratio:	2000:1
Wave front distortion:	< λ/4 @633nm
Optical damage threshold:	> 700 MW/cm2
Wavelength range:	300-1100nm
Insersion Loss	<3%
Half-Wave Voltage	3000V
Capacitance	3pF



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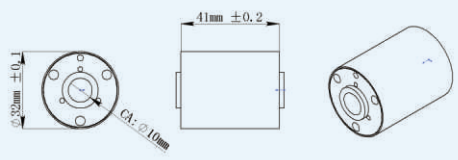

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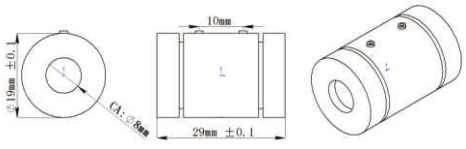
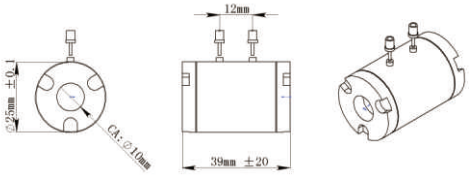


Model : CS081929



Model : CS102539G