

# DKDP 普克尔斯盒

## DKDP Pockels Cells



DKDP 电光 Q 开关 (Q-switch, Pockels Cells) 因其独特的物理特性和优异的光学品质而广泛应用于大口径、高功率、窄脉宽 (<10ns) 激光系统。DKDP 晶体是单轴晶体, 具有优异的光学质量, 其消光比>2000:1 (使用 632nm He-Ne 激光测量), 波前畸变 98%。DKDP 电光 Q 开关电容小 (约为 3-5pF), 因而上升时间短 (<0.5ns), 在调 Q 时可输出窄脉宽的脉冲激光。与市场上使用较广泛的电光晶体相比, DKDP 晶体具有较高的损伤阈值; 在脉宽 10ns、波长为 1064nm、重复频率 10Hz 的光学条件下, 损伤阈值>1GW/cm<sup>2</sup>。

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/cm<sup>2</sup> under optical conditions of 10 ns pulse width,1064 nm wavelength and repetition frequency 10 Hz.

### 主要特点 Features

- 波前畸变: 低电容 Wave front distortion:low capacitance
- 短上升时间: ~3Pf  
Short rise time:~3Pf
- 高透射率: >98%  
High transmittance:>98%
- 高损伤阈值: >1GW/cm<sup>2</sup> High damage threshold:>1GW/cm<sup>2</sup>
- 无静态双折射, 无光折变损伤  
No static birefringence, no photorefractive damage
- 防反射涂层石英窗 Anti-reflective coated quartz window
- 耐环境温度冲击, 电光性能优异  
Resistant to ambient temperature shock and excellent electro-optic performance

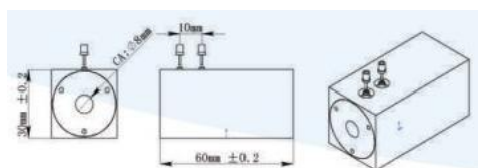


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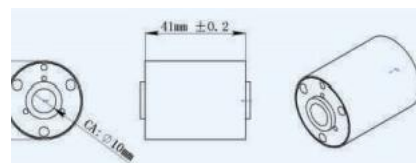
邮箱:ox3\_frank@163.com

性能参数:

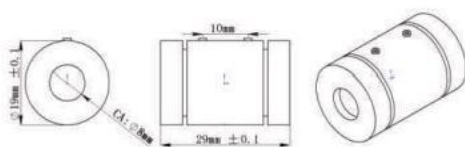
光圈(Aperture):	≤50mm
通光孔径(Clear Aperture)	≥90%
消光比(Extinction Ratio):	2000:1
Wave front distortion:	<λ/4 @633nm
Optical damage threshold:	>700 MW/cm <sup>2</sup>
Wavelength range:	300-1100nm
Insertion Loss	<3%
Half-Wave Voltage	3000V
Capacitance	3pF



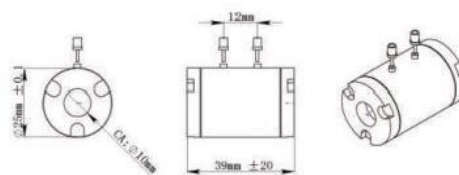
Model:30x30x60square



Model:BP103241N



Model:CS081929



Model:CS102539G

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