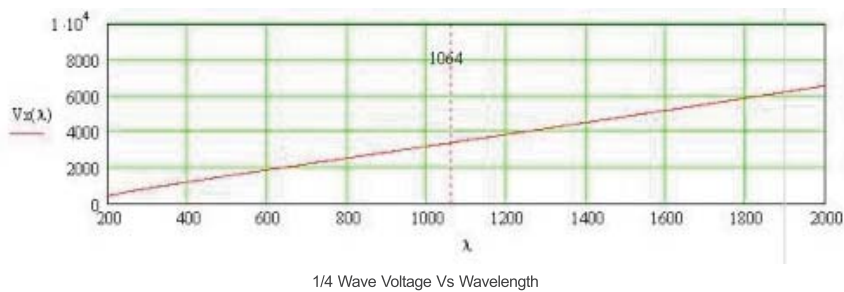


E-O Q Switch BBO

BBO is one of the electro-optic material choices for high average power E-O Q Switch applications. BBO has significant advantages over other materials in terms of laser power handling abilities, temperature stability, and substantial freedom from piezoelectric ringing. Because it relies on the electro optic effect, switching time - aided by the low capacitance of the E-O Q Switch is very fast. The wide transparency range of BBO allows it to be used in diverse applications. E-O Q Switch of DEOB series are transverse field devices. Low electro-optical coefficient of BBO results in high operating voltages. The quarter-wave voltage is proportional to the ratio of electrode spacing and crystal length. As a result, a smaller aperture device has lower quarter-wave voltage. However, even for 3mm aperture devices quarter-wave voltage is as high as 3.4KV@1064nm. Double crystal design is employed in order to reduce required voltages and allowing operation in half-wave mode with fast switching times.



FEATURES:

- High Repetition Rate
- High peak power damage resistance
- Low absorption
- UV Transmission
- Low Acoustic Noise

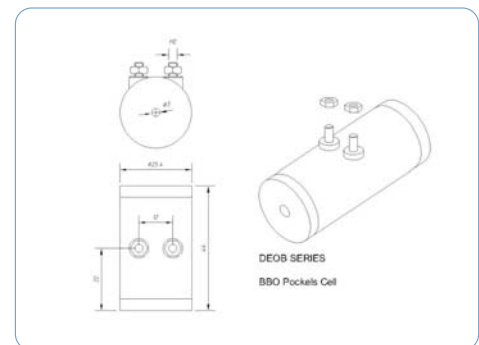
Applications:

- High repetition rate DPSS Q-Switch
- High repetition rate Regenerative Amplifier control
- Cavity Dumping
- Beam Chopper

Specifications

Description

Model Number	DEOB-254403
Aperture Diameter	2.5
Quarter-Wave Voltage@ 1064 nm	3.4KV
Optical Transmission	>98%
Damage Threshold	> 500 MW / cm ² @1064nm, 10ns
Wavefront Distortion@ 1064 nm	< λ /8
Typical Capacitance	< 3pf
Outline dimension, mm	φ 25.4 × 44





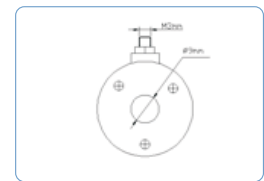
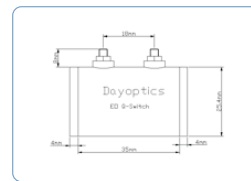
EO Q-SWITCHES-KD*P

A E-O Q Switch alters the polarization state of light passing through it when an applied voltage induces birefringence changes in an electro-optic crystal such as KD*P. When used in conjunction with polarizers, these cells can function as optical switches, or laser Q-switches. Our EO Q-switch employs the finest strain-free, highly deuterated KD*P available. Based on Dayoptics advanced crystal fabrication and coating technology, we can offer a variety of laser wavelengths EO Q switches which exhibits high transmission ($T > 97\%$), high damaged threshold ($> 500\text{W}/\text{cm}^2$) and high extinction ratio ($> 1000:1$).



Applications

- OEM Laser Systems
- Medical/Cosmetic Lasers
- Versatile R&D Laser Platforms
- Military & Aerospace Laser Systems



Features

CCI Quality - Economically Priced

Finest Strain-free KD*P

Space Efficient

Ceramic Apertures

High Contrast Ratio

Quick Electrical Connectors

Ultra-flat Crystals

Benefits

Exceptional Value

High Contrast Ratio

High Damage Threshold

Low 1/2 Wave Voltage

Ideal for Compact Lasers

Clean and Highly Damage-resistant

Exceptional Hold-off

Efficient/Reliable Installation

Excellent Beam Propagation

Electro-optical @ 1064nm

1/4 Wave Voltage	3.3 KV
Transmitted Wave Front Error	< 1/8 Wave
ICR	> 2000:1
VCR	> 1500:1
Capacitance	6 pf
AR @ 1064nm, 10ns pulse	5J/cm ²

Housing Dimensions	DEOQ-253508	DEOQ-253510	DEOQ-253513
Aperture	8 mm	10 mm	13 mm
Length	39 mm	39 mm	45 mm
Diameter	25.35 mm	25.35 mm	32 mm

