

IMPACT SERIES

KD*P Pockels Cell

Impact 8 / 9 / 10 / 13

From the world leader in nonlinear materials and electro-optic devices comes the ideal Pockels cell for OEM applications, the Impact KD*P cell. Once again, we set the industry standard, and at an exceptional value.

We employ the finest strain-free, highly deuterated KD*P available, grown in our own crystal growth facility. Ceramic apertures ensure robust performance in demanding applications.

The Impact offers high damage threshold solgel and dielectric AR coatings for a variety of laser wavelengths. Superior connectors for high-voltage applications, the standard pin-type connectors provide quick connection for simplified system design and assembly. Conventional threaded connectors are available as an option, if needed.



Features

- G&H grown, strain-free KDP/KD*P
- Compact low mass and space efficient
- Small size fits in miniature systems
- Ceramic apertures
- Premium UV-grade fused silica windows
- High transmission and contrast ratio
- Quick connect pin terminals
- High optical damage resistance
- Operational to 1 kHz

Benefits

Low loss and consistent performance

Applications

- OEM
- Medical
- Research
- Education
- Military



Performance Data

Typical Specifications 99% KD*P	Impact 8	Impact 9	Impact 10	Impact 13
PHYSICAL				
Hard aperture diameter	8 mm	9.25 mm	10 mm	13 mm
Single pass insertion loss @ 1064 nm	<2%	<2%	<2%	<2%
Intrinsic contrast ratio (ICR) @ 1064 nm	>2000:1	>2000:1	>2000:1	>2000:1
Voltage contrast ratio (VCR) @ 1064 nm (parallel polarizers)	>1500:1	>1500:1	>1500:1	>1500:1
Single pass distortion @ 633 nm	<λ/6	<λ/6	<λ/6	<\/6
ELECTRICAL				
Capacitance (DC)	6 pF	6 pF	6 pF	6 pF
DC quarter wave voltage @ 1064 nm	3.5 kV	3.5 kV	3.5 kV	3.5 kV
10-90% rise time (theoretical) into 50 Ω line	0.8 ns	0.9 ns	1.1 ns	1.1 ns
LASER DAMAGE THRESHOLD (LIDT)				
Dielectric AR window coatings for 10 ns pulse, 1 mm diameter	10 J/cm ²	10 J/cm ²	10 J/cm ²	10 J/cm ²

