



IMPACT Series KD*P Pockels Cell

IMPACT 8, 9, 10, and 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. The IMPACT employs the finest strain-free, highly deuterated KD*P available. Ceramic apertures ensure robust performance in demanding applications. The IMPACT offers high damage threshold SolGel and dielectric AR coatings for a variety of laser wave-lengths. 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.

Key Features:

- ❖ Exceptional value
- ❖ Finest strain-free KDP/KD*P
- ❖ Compact – low mass & space efficient
- ❖ Ceramic apertures
- ❖ Premium UV-grade fused silica windows
- ❖ High contrast ratio
- ❖ Quick connect pin terminals
- ❖ High optical damage resistance
- ❖ Operation to 1kHz
- ❖ Each device tested to meet specs

Key Benefits:

- ❖ Small size fits in miniature systems
- ❖ Excellent/accessible technical support
- ❖ One year limited warranty

Applications:

- ❖ OEM
- ❖ Medical
- ❖ Research
- ❖ Education
- ❖ Military

Performance Data

Typical Specifications 99% KD*P

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 @ 633nm	<λ/6	<λ/6	<λ/6	<λ/6

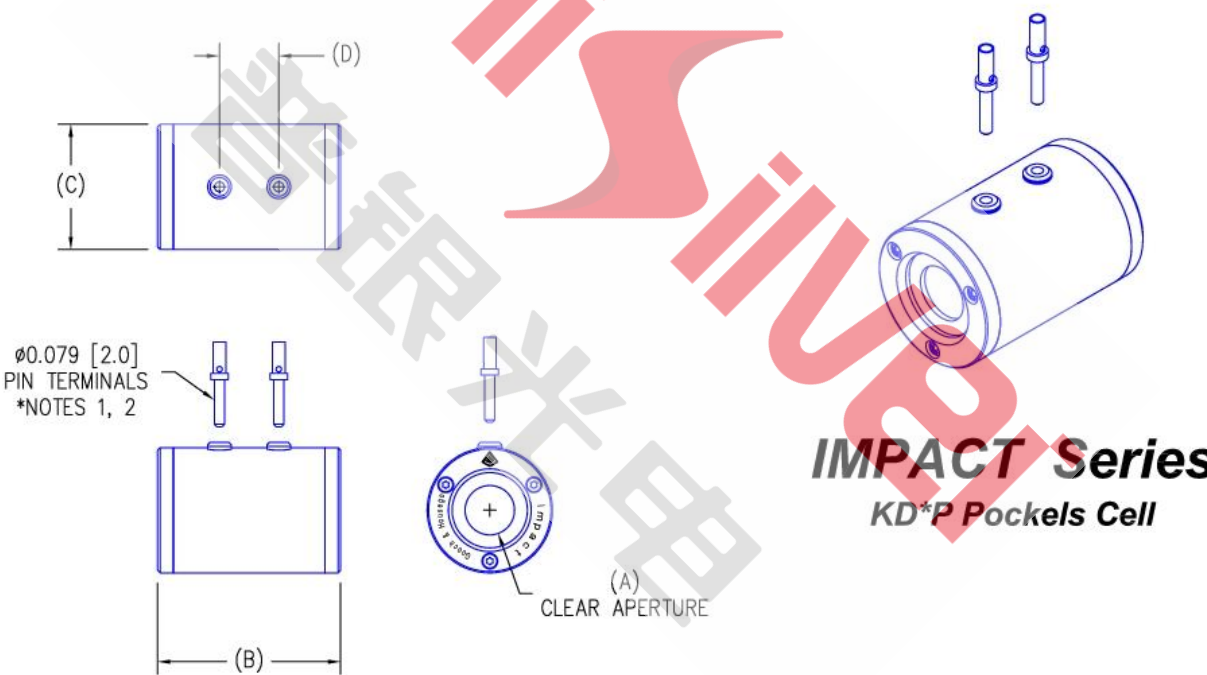
Electrical

Capacitance (DC)	6pF	6pF	6pF	6pF
DC Quarter wave voltage @ 1064nm	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 10ns pulse, 1 mm diameter	10 J/cm ²	10 J/cm ²	10 J/cm ²	10 J/cm ²
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IMPACT 8 IMPACT 9 IMPACT 10 IMPACT 13



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MODEL	DIMENSION			
	"A"	"B"	"C"	"D"
IMPACT 8	0.315 [8.0]	0.989 [25.1]	0.748 [19.0]	0.394 [10.0]
IMPACT 9	0.364 [9.25]	1.368 [34.75]	0.998 [25.3]	0.472 [12.0]
IMPACT 10	0.394 [10.0]	1.456 [37.0]	0.998 [25.3]	0.472 [12.0]
IMPACT 13	0.512 [13.0]	1.672 [42.5]	0.998 [25.3]	0.472 [12.0]

NOTES:
1) EXCEPT IMPACT 8 MODEL, THIS MODEL PROVIDED WITH 0.025" [0.64] PIN TERMINALS.
2) STANDARD PIN OPTION SHOWN. IMPACT 9, 10, 13 MODELS ALSO OFFERED WITH THREADED SCREW TERMINALS AND HEX NUTS.

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