



LGS switch :

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Lanthanum gallium silicate crystal (LGS crystal) is an optical nonlinear material with a high damage threshold. It has a high electro-optic coefficient and excellent electro-optic performance. It belongs to the trigonal crystal structure, has a small thermal expansion coefficient, and the thermal expansion anisotropy of the crystal is weak. , good temperature stability at high temperature (better than quartz crystal), two independent electro-optic coefficients are equivalent to those of BBO crystal , the electro-optic coefficient value remains stable in a large temperature range, the crystal has good mechanical properties and no cleavage Non-toxic, non-deliquescent, stable physical and chemical properties, with very good comprehensive performance. LGS crystals have a wide transmission band, and have high transmittance from ultraviolet 242nm-3550nm. It can be applied to electro-optic modulation and electro-optic Q- switching .

LGS crystal electro-optic effect performance is also very superior , high repetition frequency, large cross-sectional aperture, narrow pulse width, high power, high and low temperature, etc. LGS crystal electro-optic Q switch is suitable for all solid-state lasers with high power repetition frequency Electro-optic Q-switching , such as: LD-pumped Nd:YVO4 all-solid-state laser with high average power energy greater than 100W, the highest frequency can reach 300KHZ, the highest output can reach 715w, the pulse width is 46ns, and the continuous output can reach nearly 10w ; The optical damage threshold is more than 9-10 times that of LiNbO3 crystal ; 1/2 wave voltage and 1/4 wave voltage are lower than the same caliber BBO switch , and the material and assembly costs are lower than the same caliber RTP switch . Compared with the DKDP switch , it has no deliquescence, good temperature stability, and can be used in harsh environments. It is an electro-optic switch with excellent performance that can meet different application fields .

Material properties :

Crystal size	2x2-8x8mm
Case size	Dia.20-35mm
Extinction Ratio	>500:1
through distortion	$\lambda/6$ @632.8nm
overall transmittance	>98% @ 1064nm
Isolation between electrodes	<1
smoothness	20/10 (40/20 after the film)
capacitance	8pF
coating	AR/AR @1064nm(R<0.2%)
Anti-photodamage	900MW/cm ² 10ns 10Hz 1064nm

Product Specifications :

model	OCP - 8-30 55-32K -8-5	OCP - 7-30 55-32K -8-5
Shell size (mm)	D30 x 55	D30 x 55
Crystal size (mm)	8x8x45	7x7x50



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Extinction Ratio	>350:1	>350:1
overall transmittance	>98%	>98%
1/4 wave voltage	3.2 kv	3.2 kv
through distortion	$\lambda/6$	$\lambda/6$
wavelength	Other wavelengths can be customized	Other wavelengths can be customized