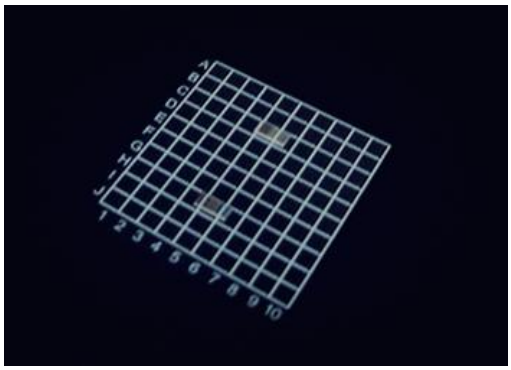
MgO:PPLN Crystals Chips for 775nm Laser Generation

- **High efficiency**
- **Small size**
- **Easy to be assembled into DPSS laser**

MgO doped periodically poled lithium niobate (or MgO:PPLN crystals) is a highly efficient nonlinear frequency conversion crystal. It can be used as SHG, DFG, SFG, OPO and OPA components in lasers. Hangzhou Shalom EO offers the **MgO:PPLN crystal** of SHG of 1550nm laser which can generate 775nm laser. The crystals is small in size and easy to be assembled into your DPSS laser systems.



SPECIFICATIONS

Optical Specifications	
Length	0 ~ 40mm
Width	2.5mm
Thickness	0.5mm
Coating on Input facet	AR@1550nm + AR @775nm
Coating on Output facet	AR@1550nm + AR@775nm
Operation Temperature	40ºC and 50 ºC

Note: The PPLN crystals with the Copper heat-sink packing is available.

Polishing Specifications	
Tolerance of Size	(Width±0.1mm) x (Thickness±0.05mm) X (Length±0.1mm)
Flatness	< Lambda/8 @ 633nm
Wavefront Distortion	< Lambda/6 @ 633nm
Chips	<0.1mm
Surface Quality	20/10 S/D
Parallelism	<10″
Perpendicularity	<10′

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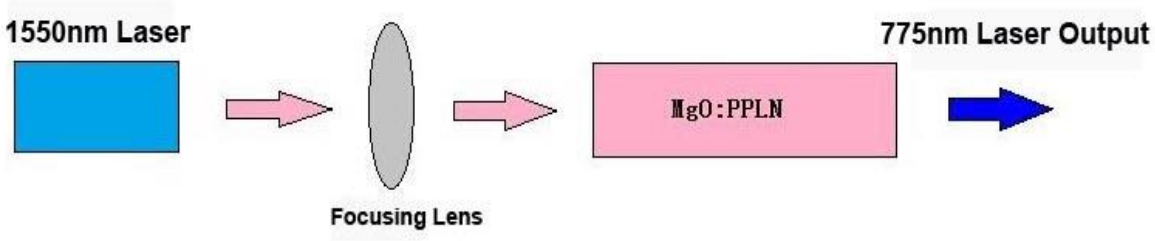
Basic Properties

Chemical and Physical Properties	
Melting Point	1255+/-5 ºC
Curie Point/Temperature	1140+/-5 ºC
Mohs Hardness	5
Density	4.648(5)g/cm3
Thermal conductivity	38W/m/K @ 25 ºC
Coefficient of thermal expansion	//a, 2.0x10-6/K //c, 2.2x10-6/K

Optical and Nonlinear properties	
Wavelength range of Transmission	420nm ~ 5200nm
Nonlinear coefficient	d33 = 34.4 pm/V d31 = d15 = 5.95 pm/V d22 = 3.07 pm/V
Optical Damaging Threshold	0.3GW/cm2
Absorptive Coefficient	0.004/cm @ 1064nm

Application Notes



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