

Rochon Polarizers

Product Description:

A Rochon polarizer is similar to a wollaston polarizer with a different optical axis orientation in the first birefringent wedge. Both ordinary and extraordinary beams propagate along the optic axis in the first prism under the ordinary refractive index. Upon entering the second prism, the ordinary beam experiences the same refractive index and passes through with a deviation, and the extraordinary beam has a different refractive index and is deviated. The divergent angle is decided by the wedge angle for a given crystal and can be designed upon your request.

You may refer to this page (http://www.pmoptics.com/crystals.html) for material properties



Features:

- High Polarization Purity
- High Transmittance
- Wide wavelength Range
- Wide acceptance angle
- o-ray passing through with little deviation
- Multiple-choice crystal materials

Specifications:

Materials	Alpha-BBO (190~3500nm) Calcite (350~2300nm) YVO4 (450~5000nm)	
	MgF2(130~7000nm)	
Dimension Tolerance	±0.1mm	

	Alpha-BBO, YVO4 $< 1 \times 10^{-6}$		
Extinction Ratio	Calcite $< 5 \times 10^{-5}$		
	MgF2 $< 1 \times 10^{-4}$		
Flatness	λ/4 @ 632.8nm		
Surface Quality	20~10		
Beam Deviation (o-ray)	< 3 arc minutes		
	Alpha-BBO: 1° at 800nm		
Beam Deviation (e-ray)	$YVO4 < 10^{\circ}$ at 1550nm		
	MgF2: 1° at 980nm		
AR coating	Single Layer MgF2 on input and output		
	surfaces		
Mount	Black Anodized Aluminum		

Ordering Information:



		1550=1550nm
Α	Wavelength	980=0980nm
		XXXX=Your Application Wavelength
В	Material	1=YVO4
		2=Calcite
		3= Alpha-BBO
		4=MgF2
		0=Special
С	Dimensions	01=6.0mm(\$\phi\$1)X15.0mm(\$\phi\$2)X14.0mm(L)
		Check Standard Size Table Below
		00=Custom Dimensions

Standard Size Table:

Dimension	Clear Aperture	Outside Diameter	Length
P/N	Φ1 (mm)	Φ2 (mm)	L (mm)
01	6.0	15.0	14.0
02	8.0	25.4	18.5
03	10.0	25.4	28.0
04	15.0	30.0	38.0
05	20.0	38.0	48.0