

Birefringent Wedges

Product Description:

A birefringent wedge divides a light beam into two orthogonally polarized beams as indicated in figure 1. The polarization with the larger refractive index is deviated by a larger angle.

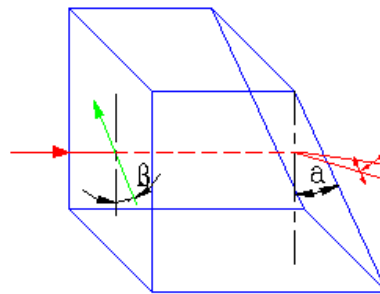


Figure 1: An YVO4 birefringent wedge splits a light beam into two orthogonally polarized beams with polarization parallel with optical axis by a larger angle.

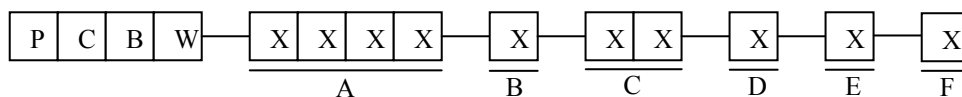
Birefringent wedges are widely used in fiber optics such as isolators, circulator as well as other applications. Precision Micro-Optics offers superior quality YVO4 and LiNbO3 Birefringent wedges.

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

Specifications:

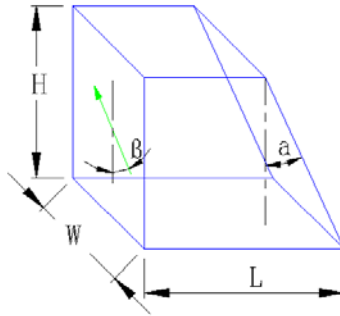
Material	YVO4 or LiNbO3
Dimensional Tolerance	± 0.05 mm
Optical Axis Orientation Tolerance	$\pm 0.2^\circ$
Wedge Angle Tolerance	$\pm 0.2^\circ$
Clear Aperture	> 90%
Surface Quality	20~10
Flatness	$\lambda / 8 @ 632.8\text{nm}$
AR coating	Specified by customer

Ordering Information:



A	Wavelength	1550=1550nm
		980=0980nm
		XXXX=Your Application Wavelength
B	Material	1=YVO4
		2=LiNbO3
		0=Special
C	Dimensions	01=0.5X1.4X1.4X5X22.5
		Check Standard Size Table Below
		00=Custom Size
D	Optical Axis Angle (β)*:	1=0°
		2=22.5°
		3=45°
		4=90°
		0=special
E	AR Coating	1=yes
		0=no
F	Mount	1=Yes
		0=no

Standard Size Table



Dimension P/N	Crystal	L (mm)	W (mm)	H (mm)	α (°)	β (°)
01	YVO4	0.5	1.4	1.4	5	22.5
02	YVO4	0.5	1.4	1.4	8	22.5
03	LiNbO3	0.25	1.25	1.25	13	22.5
04	LiNbO3	0.25	1.25	1.25	15	22.5