

Fresnel Rhomb Retarder

Product Description:

Fresnel Rhomb Retarders function like an achromatic waveplate to provide a uniform $\lambda/4$ or $\lambda/2$ phase retardation over a wider range of wavelengths. Fresnel Rhomb Retarders are designed to have a phase change different between the S-polarization and P-polarization when a light beam is reflected by TIR at a special designed incident angle. Because the phase change is a function of the slowly varying glass dispersion, its change with wavelength is much lower than other types of retarders.

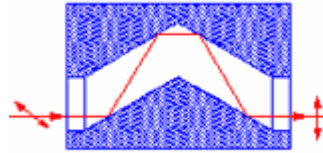
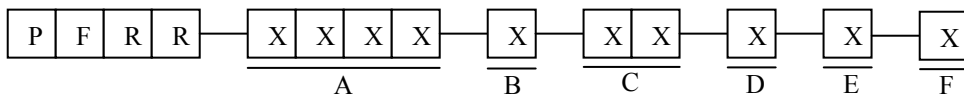


Figure 1: A $\lambda/2$ phase retardation fresh rhomb retarder

Specifications:

Material	BK7 or Fused Silica
Wavelength Range	400~2000nm
Dimensional Tolerance	+0.0, ± 0.15 mm
Phase Retardation Variation	< 2% (>600nm)
Flatness	$\lambda/8$ @ 632.8nm
Surface Quality	20~10
Clear Aperture	> 80%
AR coating	Specified by customer

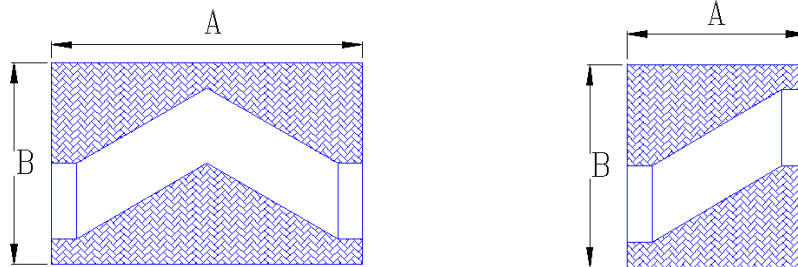
Ordering Information:



A	Wavelength	1550=1550nm
		980=0980nm
		XXXX= Your Application Wavelength
B	Material	1=BK7
		2=Fused Silica
		0=Special

C	Dimensions	01=10mm
		Check Standard Size Table Below
		00=Custom Dimensions
D	Phase Retardation	2=$\lambda/4$
		3=$\lambda/2$
		0=no
E	AR Coating	1=Yes
		0=No
F	Mount	1=Yes
		0=No

Standard Size Table with Mount:



Dimensions P/N	A(mm)	B(mm)	H(mm)	Phase Retardation
01	35.0	40.0	37.0	$\lambda/4$
02	64	40.0	37.0	$\lambda/2$