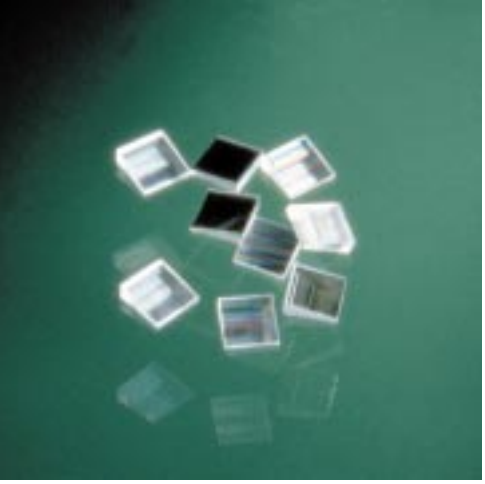


Product Summary

$LiNbO_3$ Wedges

Precision, birefringent $LiNbO_3$ wedges for optical isolators..

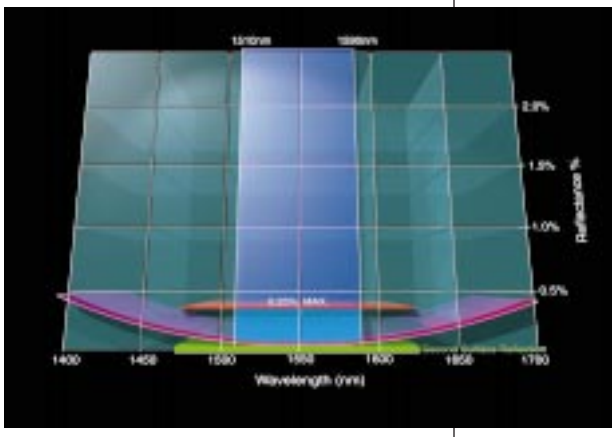
A compact, highly efficient optical isolator can be produced by mating a pair of birefringent $LiNbO_3$ wedges together with a Faraday polarization rotator. By building on our comprehensive knowledge of processing crystalline materials for laser applications, Spectra-Physics has positioned itself as the premier supplier of LiNbO3 wedges for telecommunications applications. We're able to produce literally tens of thousands of wedges per day, while maintaining tight optical and mechanical tolerances, maximizing the useable component clear aperture and applying low loss, high efficiency broadband antireflection coatings.

Features

- High volume manufacturing
- Telcordia compliant
- Maximum clear aperture
- Available for 1480 nm, C and L bands

Applications

- Passive Isolators



Spectra-Physics TELECOM
1335 Terra Bella Avenue, Mountain View CA 94043 Toll free 1-888-735-5774
Telephone +1-650-966-5444 e-mail: telecomsales@splasers.com

$LiNbO_3$ Wedges

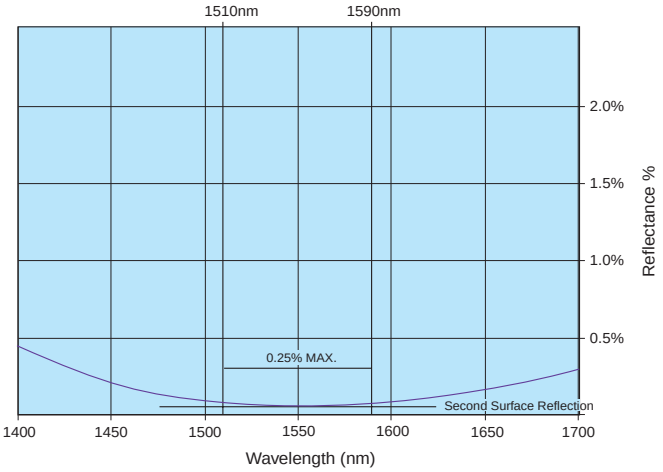
Physical Dimensions	**12 Degree**	**15 Degree**
Length	1.22mm	1.22mm
Width	1.22mm	1.22mm
Thickness(thin edge)	0.2mm	0.24mm
Wedge	12 degree	15 degree

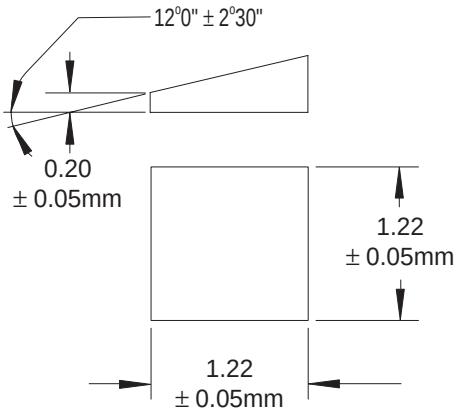
Optical Parameters	
Crystal Orientation Angle	22.5 degrees from Z reference flat ±0.3 degrees
Edge Chip	<50 microns
Corner Chip	<150 microns
Clear Aperture	1mm diameter, centered
Scratch/Dig	20/10 standard
	No contamination within CA at 25x magnification

Coatings Performance	
Side 1	R (average polarization) <0.25% @ 0 degrees from 1510 nm to 1590 nm
Side 2	R (average polarization) <0.25% @ 0 degrees from 1510 nm to 1590 nm

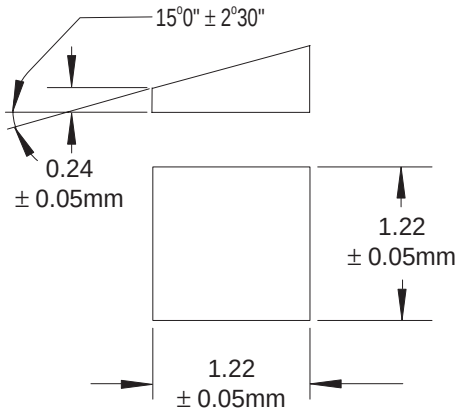
Other wavelengths ranges available on request

Typical Spectral Performance





12 degree



15 degree

Due to our continuous improvement program, specifications are subject change without notice.