iXblue

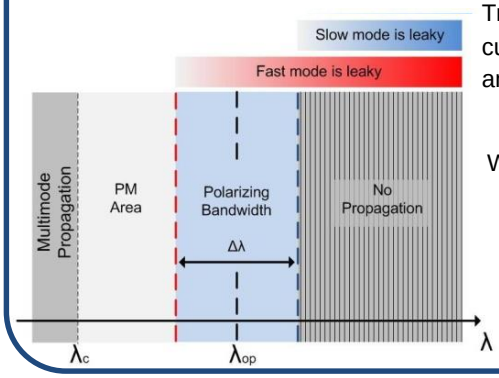
light.augmented with **IXF-PZG-780-125**

POLARIZING OPTICAL FIBER for applications at 780 nm

APPLICATIONS: **All-Fiber Polarizers; Fiber Lasers; Single-Frequency Laser Transmission; Interferometry; Fiber Pigtails; Fiber Delay Lines**

HOW IT WORKS?

A Polarizing Fiber selectively attenuates the light propagating along one polarization axis (Fast Axis) and preserves only the polarized light along the other principal axis (Slow Axis).



Transmission spectra showing two separate cut-offs for the polarization modes in the fast and slow axes at different spectral positions.

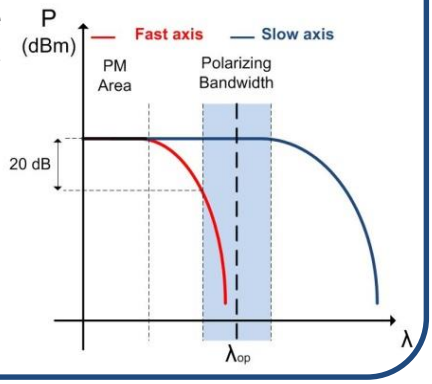
Design wavelength (λ_{op})

Wavelength at which the fiber is typically used

Polarizing Bandwidth ($\Delta\lambda$)

> 20 dB short wavelength edge

< 1 dB long wavelength edge

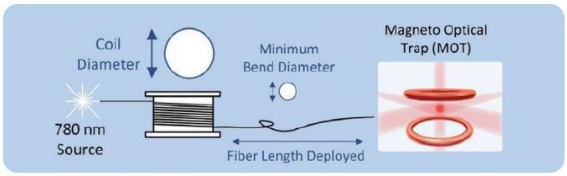


SPECIFICATIONS

Typical Polarization Performance		*Other Specifications*	
Operational Wavelength (nm)	780	Design	Tiger
Polarizing Bandwidth (nm)	> 50	MFD (µm) @1064 nm	5.5 ±1
Extinction Ratio (dB) @1064 nm	> 30	Cladding Diameter (µm)	125 ±1
Attenuation (dB/m) @1064 nm	< 0.02	Minimum Bend Diameter (cm)	> 2

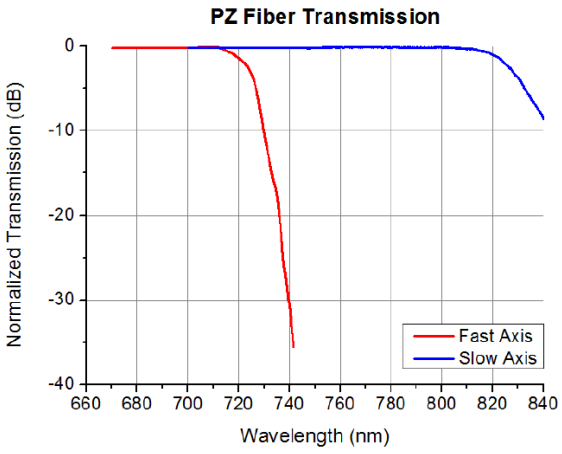
The deployment of the PZG fiber is key to its performance.

Usage example: Single-Frequency Laser Transmission



Configuration example:

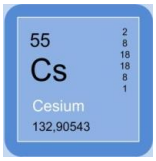
- Deport lengths: 3 m one side, 1 m other side
- Protective jacket: Ø3 mm cable with Kevlar strain-relief
- Connectors FC/APC at both ends



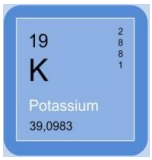
→ According to your needs and your constraints, we have a Polarizing Solution!

Available on request: Connectorization FC/APC & SC/APC (PER>30 dB); LSZH Up-jacketing 2.5 mm; Coil Packaging

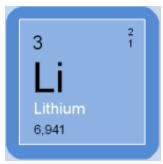
OTHER POLARIZING WAVELENGTHS AVAILABLE



895 & 852 nm



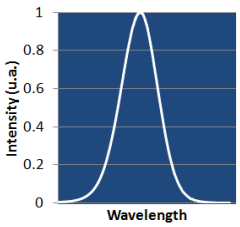
770 & 767 nm



670 nm

795 nm

1064 nm



830 nm

1310 nm

1550 nm