

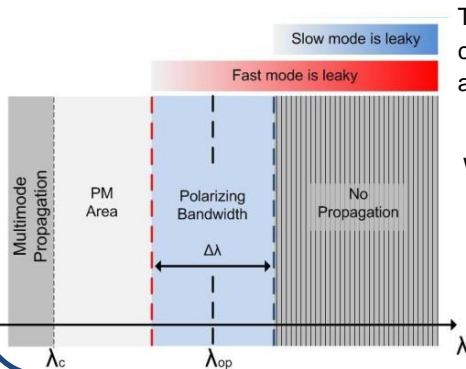
light.augmented with **IXF-PZG-1064-125**

POLARIZING OPTICAL FIBER for applications from 1030 to 1090 nm

APPLICATIONS: All-Fiber Polarizers; Fiber Lasers; Single-Frequency Laser Transmission; Interferometry; Fiber Pigtailed; 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.

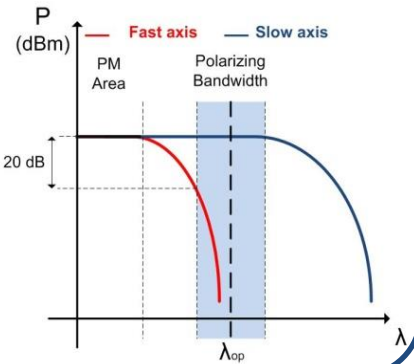
Design wavelength (λ_{op})

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) | 1064 | Design | Tiger |
| Polarizing Bandwidth (nm) | > 80 | MFD (μm) @1064 nm | 8 \pm 1 |
| Extinction Ratio (dB) @1064 nm | > 30 | Cladding Diameter (μm) | 125 \pm 1 |
| Attenuation (dB/m) @1064 nm | < 0.02 | Minimum Bend Diameter (cm) | > 2 |

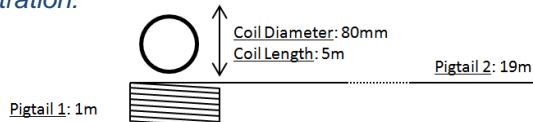
The deployment of the PZG fiber is key to its performance.

3 case studies:

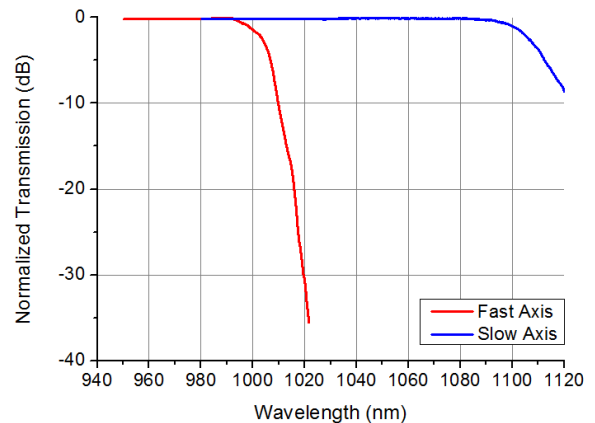
- A) All-Fiber Polarizer 60mm (5m) B) Delay Line 200m (120mm)

- C) Single-Frequency Laser Transmission
20m straight = 19+1m (+5m/80mm)

Illustration:



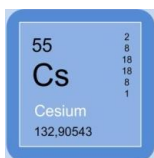
PZ Fiber Transmission



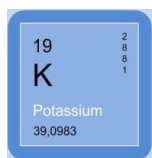
→ According to your needs and your constraints, we have a Polarizing Solution!

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

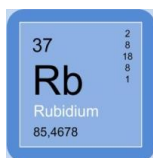
OTHER POLARIZING WAVELENGTHS AVAILABLE



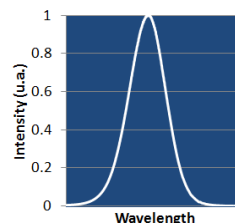
895 & 852 nm



770 & 767 nm



795 & 780 nm



830 nm

1310 nm

1550 nm