



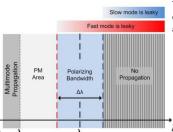
light.augmented with IXF-PZG-1064-125

POLARIZING OPTICAL FIBER for applications from 1030 to 1090 nm

APPLICATIONS: All-Fiber Polarizers; Fiber Lasers; Single-Frequency Laser Transmission; Interferometry; Fiber 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 (λορ)

Wavelength at which the fiber is typically used

Polarizing Bandwidth (Δλ)

- > 20 dB short wavelength edge
- < 1 dB long wavelength edge

(dBm)	Fast axis Slow axis			
	PM Area	Polarizing Bandwidth		
^				
20 dB				
		\		
			1	
-		λ _{op}		

SPECIFICATIONS

Typical Polarization Performance		Other Specifications		
Operational Wavelength (nm)	1064	Design	Tiger	
Polarizing Bandwidth (nm)	> 80	MFD (μm) @1064 nm	8 ±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.

3 case studies:

- A) All-Fiber Polarizer 60mm (5m)
- B) <u>Delay Line</u> 200m (120mm)
- C) Single-Frequency Laser Transmission 20m straight = 19+1m (+5m/80mm) Illustration:



→ 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





0.8 (0.8 0.4 0.2 0.2 0 Wavelength

830 nm 1310 nm 1550 nm

895 & 852 nm

770 & 767 nm

795 & 780 nm

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