

## PM Matching Birefringence Fiber 1550nm

### Applications

- Pigtail to LiNbO3 FOG chip (IOC)
- Polarization maintaining fused-fiber couplers
- Polarization-sensitive components
- High performance transmission laser pigtails
- Polarization-based sensors

### Characteristics

- Excellent birefringence matching properties
- Excellent polarization maintaining properties
- Excellent polishing properties
- Tight geometric tolerances
- Low bending-induced attenuation
- Tight tolerance, dual-layer, and UV-Acrylate coating
- High environmental stability and reliability



### Specifications

Part Number	110B-250	110D-165	110D-250
<b>Optical Properties</b>			
Operating Wavelength (nm)	1550	1550	1550
Cut-Off Wavelength (nm)	1290 - 1520	1290 - 1520	1290 - 1520
Mode Field Diameter ( $\mu\text{m}$ )	$7.0 \pm 1.0$	$6.5 \pm 1.0$	$6.5 \pm 1.0$
Attenuation (dB/km)	$\leq 0.5$	$\leq 1.0$	$\leq 0.6$
Beat Length (mm)	4.5 - 6.5	3.0 - 4.5	3.0 - 4.5
Typical Cross Talk at 4m (dB)	$\leq -30$	$\leq -30$	$\leq -30$
Cross Talk at 100m (dB)	$\leq -25$	$\leq -25$	$\leq -25$
<b>Geometric Properties</b>			
Cladding Diameter ( $\mu\text{m}$ )	$125.0 \pm 1.0$	$80.0 \pm 1.0$	$125.0 \pm 1.0$
Coating Diameter ( $\mu\text{m}$ )	$245.0 \pm 7.0$	$170.0 \pm 7.0$	$245.0 \pm 7.0$
Cladding Non-Circularity (%)	$\leq 1.0$	$\leq 1.0$	$\leq 1.0$
Core Concentricity Error ( $\mu\text{m}$ )	$\leq 1.0$	$\leq 1.0$	$\leq 1.0$
Coating Type	Dual-layer/UV-Acrylate	Dual-layer/UV-Acrylate	Dual-layer/UV-Acrylate
<b>Environmental and Mechanical</b>			
Operating Temperature Range ( $^{\circ}\text{C}$ )	-45 to +85	-45 to +85	-45 to +85
*Proof Test Level (kpsi)	0.70 GN/m <sup>2</sup> (100 kpsi)	0.70 GN/m <sup>2</sup> (100 kpsi)	0.70 GN/m <sup>2</sup> (100 kpsi)