



TruePhase® 1550 125/250 R5 Bend-Insensitive Polarization-Maintaining Optical Fiber

P/N: F77439

Features

- R5 Bend-insensitive (bending radius 5 mm),
- Low beat length of ≤ 5 mm
- High birefringence
- Tight geometrical tolerances
- Available with Standard Dual Layer, or High Temperature Coating
- Other options include 900 μ m Hytel® or 900 μ m PVC buffer

Product Overview

TruePhase® Bend-Insensitive Polarization-Maintaining (BI PMF) Optical Fiber for use in small bend radius applications that demand superior bending performance. At 1550 nm and at a very demanding 5 mm, the macro-bend induced loss of the fiber is less than 0.1 dB/turn.

The fiber is available with a standard communications grade, 250 μ m dual layer UV acrylate coating.

TruePhase Optical Fibers utilize industry-standard stress applying parts (SAPs) to create two axes in the core, each of which guides light at a different velocity; a Panda design. This standard design allows for the use of easy splice recipes offered by the major fusion splicer manufacturers.

Typical Applications

- Laser Pigtailed
- Photonic Integrated Circuits
- Polarization-Sensitive Components
- PMD Compensators
- Polarizing Beam Splitters

Product Specifications		
Product Description	TruePhase 1550 125/250 R5 Bend-Insensitive Optical Fiber	
Physical Characteristics		
Operating Wavelength	1550 nm	1625 nm
Cutoff Wavelength	< 1550 nm	
Mode field diameter	9.9 ± 0.5 µm	10.3 µm
Attenuation	≤ 0.8 dB/km	≤ 2.5 dB/km
Beat Length	< 5 mm	≤ 5.5 mm
Crosstalk	≤ - 30 dB/100 m	≤ - 30 dB/100 m
Crosstalk typical	≤ - 35 dB/100 m	≤ - 35 dB/100 m
Crosstalk Under Bend	≤ - 30 dB/100 m, 1 turn @ 5 mm radius ≤ - 30 dB/100 m, 10 turns @ 7.5 mm radius	TBD
Macrobending Loss	≤ 0.1 dB, 1 turn @ 5 mm radius ≤ 0.1 dB, 10 turns @ 7.5 mm radius	TBD
Optical Characteristics		
Cladding Diameter	125 ± 1 µm	125 ± 1 µm
Core/Clad Concentricity Error	≤ 0.5µm	≤ 0.5µm
Clad Non-Circularity	≤ 2.0%	≤ 2.0%
Coating Diameter	250 ± 10 µm	250 ± 10 µm
Mechanical and Environmental		
Tensile Proof Test	200 kpsi (1.38 GPa)	200 kpsi (1.38 GPa)
Order by Part Number	F77439	F77439
Product Description	TruePhase 1550 125/250 R5 Bend-Insensitive Polarization Maintaining Fiber	
Regulatory Compliance	REACH and RoHS Compliant	
Quality Certification	ISO 9001 Certified	
OPTIONS	Cabling, Coating Material and Dimensions, Metallization, Optical Properties, Proof Test	
NOTE	Specifications in italics are estimates only.	
Contact Information	For additional information please contact your sales representative. You can also visit our website at www.lightera.com or call 1-888-FIBERHELP (1-888-342-3743) USA or 1-770-798-5555 outside the USA. For a full list of our certifications, visit our website.	
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