

PANDA PM Bend Insensitive Specialty Optical Fibers

CORNING



*Polarization
Maintaining
Fibers for Bend
Sensitive
Applications*

PANDA PM Bend Insensitive Specialty Optical Fiber is designed with significantly improved bending capacity, suited to meet the needs of package size reductions and 100 Gbps systems.

PANDA PM fibers are optimized for high reliability, and our Boron-doped stress rod profile is field proven to support high growth applications over a wide temperature range.

Applications:

- Small package size transponders, transceivers, modulators and laser fiber assemblies
- Sensors
- Bend sensitive applications
- Miniaturized components
- Polarization sensitive components

Features:

- Significantly improved bending capacity
- Extremely high birefringence
- Single-mode design
- Fibers available with dual-layer UV acrylate and flame retardant polyester coatings

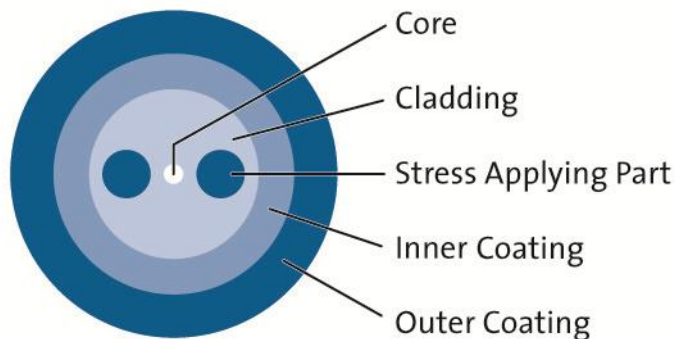
Key Optical Specifications

	BIPM 1550	PMSR 1550
Wavelength (nm)	1550	1550
Mode-field Diameter (μm)	9.0 ± 0.4	9.5 ± 0.4
Maximum Beat Length (mm)	3.0	2.0 – 5.0
Maximum Cross Talk at 100 m (dB)	≤ -30	≤ -30
Maximum Bending Cross Talk (dB)	≤ -30 ($\lambda = 1550$ nm, bending diameter = 15 mm, 10 turns)	≤ -30 ($\lambda = 1550$ nm, bending diameter = 30 mm, 10 turns)
Cutoff Wavelength (mm)	≤ 1.44	≤ 1.44
Maximum Attenuation (dB/km)	≤ 3.0	≤ 0.50

Key Geometric, Mechanical and Environmental Specifications

Coating Type	UV / UV Acrylate	UV Acrylate / Polyester- Elastomer	UV / UV Acrylate	UV Acrylate/ Polyester- Elastomer	UV Acrylate / Polyester- Elastomer	UV Acrylate / Polyester- Elastomer
Part Number	BIPM15-U25D-H	BIPM15-U50D-H	PMSR15-U25D-H	PMSR15-U40D-H	PMSR15-U50D-H	PMSR15-U90D-H
Core-to-Cladding Offset	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
Coating Outer Diameter (μm)	254 ± 15	500 ± 50	245 ± 15	400 ± 15	500 ± 50	900 ± 100
Cladding Outer Diameter (μm)	125 ± 1 (major diameter)	125 ± 1 (major diameter)	125 ± 1 (major diameter)	125 ± 1 (major diameter)	125 ± 1 (major diameter)	125 ± 1 (major diameter)
Bending Radius (mm)	R7.5	R7.5	R15.0	R15.0	R15.0	R15.0
Operating temperature ($^{\circ}\text{C}$) (Without coiling on a shipping reel)	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85	-40 to 85
Standard Lengths (m)	100, 200, 300, 400, 500	100, 200, 300, 400, 500	100, 200, 300, 400, 500	100, 200, 300, 400, 500	100, 200, 300, 400, 500	100, 200, 300, 400, 500
Proof Test (kpsi)	2% minimum	2% minimum	2% minimum	2% minimum	2% minimum	2% minimum

Typical Cross-sectional View of PANDA PM Specialty Optical Fiber



PANDA PM Specialty Optical Fiber design uses two stress applying parts to create an extremely high birefringence, resulting in fiber with excellent polarization maintaining properties. This design was invented and patented by Corning Incorporated. Corning continues to have a manufacturing partnership with Fujikura Ltd.

For more information about Corning's leadership in Specialty Fiber technology visit our website at www.corning.com/specialtyfiber

To obtain additional technical information, an engineering sample or to place an order for this product, please contact us at:

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M0500021 - rev1.0.
 Issued: April 2015
 Supersedes: November 2013