

PANDA PM Flame Retardant Specialty Optical Fibers

CORNING



Polarization Maintaining Fibers Buffered with Polyester Elastomer

PANDA PM Flame Retardant Specialty Fibers are 400 μm UV coated fibers buffered to 900 μm with a flame retardant polyester elastomer. The buffer is a UL[®] recognized component plastic with a flammability classification of V-O in accordance with UL94. In addition, the buffered fiber has a VW-1 end product flammability classification in accordance with UL1581. All PANDA PM fibers are designed with the best polarization maintaining properties and are the industry standard in the world today, offer low attenuation and excellent birefringence for high performance applications.

Applications:

- Systems with requirements for low flammability
- Gyroscopes and interferometers
- High performance transmission laser pigtailed
- Polarization-based modulators
- High data rate communications systems
- Polarization-sensitive components

Features:

- Tight buffer composed of polyester elastomer and flame retarder is a UL[®] recognized component plastic with a flammability classification of V-O in accordance with UL94
- Fibers have a VW-1 end product flammability classification in accordance with UL1581
- Extremely high birefringence
- Excellent polarization maintaining properties
- Low attenuation.

Key Optical Specifications

Wavelength (nm)	1550	1400-1490	1300	980	850	630	480	410
Mode-field Diameter (µm)	10.5 ± 0.5	9.8 ± 0.5	9.0 ± 0.5	6.6 ± 0.5	5.5 ± 0.5	4.5 ± 0.5	4.0 ± 0.5	3.5 ± 0.5
Beat Length Range (mm)	3.0-5.0	2.8-4.7	2.5-4.0	1.5-2.7	1.0-2.0	≤ 2.0	≤ 2.0	≤ 1.7
Maximum Cross Talk at 100 m (dB)	-30	-30	-30	-30	-30	-30	-30	-30*
Typical Cross Talk at 4 m (dB)	-40	-40	-40	-40	-40	-40	-40	-40
Cutoff Wavelength (nm)	1300-1440	1260-1380	1130-1270	870-950	650-800	520-620	400-470	330-400
Maximum Attenuation (dB/km)	0.5	1.0	1.0	2.5	3.0	12	30	≤ 50

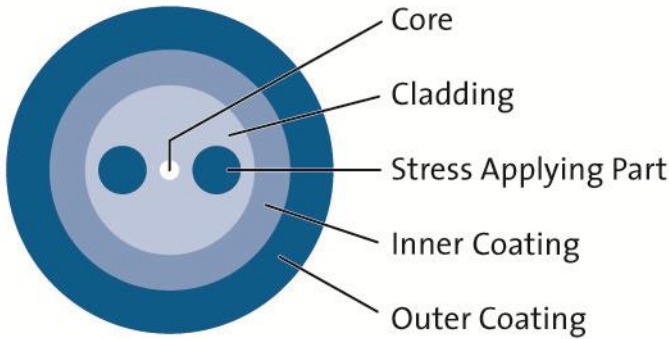
Key Geometric, Mechanical and Environmental Specifications (-H90D)

UV Polyester-Elastomer

Part Number	PM15-H90D	PM14-H90D	PM13-H90D	PM98-H90D	PM85-H90D	PM63-H90D	PM48-H90D	PM40-H90D
Core-to-Cladding Offset (µm)	≤ 0.5							
Coating Outer Diameter (µm)	900 ± 100							
Cladding Outer Diameter (µm)	125 ± 1							
Standard Lengths*	100 m, 200 m, 300 m, 400 m, 500 m, 1 km							
Proof Test (kpsi)	100 or 200							
Operating Temperature (°C)	-40 to 85							

* For longer lengths contact Corning

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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