

1060 nm Polarization Maintaining Fiber



Coherent's broad line of PM fibers now includes PM1060L & PM1060L-FA fibers. These fibers are optimized for operation at 1060 nm and feature a low 0.085 NA (L). They are ideally designed for pump combiner and coupler applications for single-mode fiber lasers. The PM1060L fiber is a single clad fiber and PM1060L-FA is double clad fiber to cover all your application needs. Utilizing the PANDA design, these fibers demonstrate superior polarization control, resulting in increased system efficiencies.

Typical Applications

- Couplers and combiners
- Pump combiners
- Single clad and double clad devices

Features & Benefits

- Low insertion loss — Lower system cost
- Low 0.085 NA— maintains single-mode operation
- Tight specifications — Highly deterministic results, highest product yield

Optical Specifications

	PM1060L	PM1060L-FA
Operating Wavelength	980 – 1150 nm	980 – 1150 nm
Core NA	0.085	0.085
First Cladding NA (5%)	N/A	≥ 0.460
Mode Field Diameter (Gaussian)	10.5 ± 0.5 μm @ 1060 nm 10.5 ± 0.5 μm @ 1060 nm	10.5 ± 0.5 μm @ 1060 nm 10.5 ± 0.5 μm @ 1060 nm
Cutoff	940 ± 40 nm	940 ± 40 nm
Core Attenuation	≤ 5.0 dB/km @ 1060 nm	≤ 5.0 dB/km @ 1060 nm
Cladding Attenuation	N/A	≤ 15.0 dB/km @ 1095 nm
Beat Length	≤ 3.5 mm @ 1060 nm	≤ 3.5 mm @ 1060 nm
Normalized Cross Talk	≤ - 40.0 dB at 5 m @ 980 nm ≤ - 30.0 dB at 100 m @ 980 nm	≤ - 30.0 dB at 100 m @ 980 nm 980 nm ≤ - 40.0 dB at 5 m @ 980 nm nm

Geometrical & Mechanical Specifications

	PM1060L	PM1060L-FA
Cladding Diameter	125.0 ± 1.0 μm	125.0 ± 1.0 μm
Core Diameter	8.5 μm	8.5 μm
Coating Diameter	245.0 ± 15.0 μm	245.0 ± 15.0 μm
Coating Concentricity	< 5.0 μm	< 5.0 μm
Core/Clad Offset	≤ 0.50 μm	≤ 0.50 μm
Operating Temperature Range	-40 to 85 °C	N/A
Prooftest Level	≥ 100 kpsi (0.7 GN/m ²)	≥ 100 kpsi (0.7 GN/m ²)



Nufern • 7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 • Email: tech.sales@coherent.com
www.coherent.com ; www.shop.coherent.com • Coherent products are manufactured under an ISO 9001:2008 certified quality management system.



Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Coherent can assist with your requirements.