Polarization Maintaining Fibre for Component

Grinding Polarization Maintaining Fibre for Component

Characteristics

- Excellent grinding properties
- Tight geometric tolerances
- High environmental stability and reliability
- Excellent polarization maintaining properties

Applications

- High performance transmission laser pigtails
- Polarization-sensitive components
- Polarization maintaining device pigtails

Specifications-1

Fibre Type	PM 780_ 125-12/250	PM 850_ 125-12/250	PM 980_ 125-12/250	PM 980_ 125-12/400	PM 1310_ 125-13/250	PM 1310_ 125-13/400
Part No.	PM1013-A	PM1012-A	PM1015-A	PM1025-A	PM1016-C	PM1026-C
Optical Properties						
Operating Wavelength (nm)	780	850	980	980	1310	1310
Cut-off Wavelength (nm)	600 ~ 750	650 ~ 800	800 - 970	800 - 970	1100 - 1290	1100 - 1290
Mode Field Diameter (μm)	5.0±0.5@780nm	5.5±0.5@850nm	6.5 ± 0.5@980nm	6.5 ± 0.5@980nm	9.0 ± 0.5@1310nm	9.0 ± 0.5@1310nm
Attenuation (dB/km)	⩽ 4.0	⩽ 3.0	⩽ 2.5	⩽ 2.5	⩽ 0.5	⩽ 0.5
Beat Length (mm)	⩽ 3.0	⩽ 3.0	⩽ 3.0	⩽ 3.0	⩽ 4.0	⩽ 4.0
Typical Cross Talk at 4m (dB)	⩽ -40@780nm	⩽ -40@850nm	⩽ -40@980nm	⩽ -40@980nm	⩽ -40@1310nm	⩽ -40@1310nm
Cross Talk at 100m (dB)	⩽ -30@780nm	⩽ -30@850nm	⩽ -30@980nm	⩽ -30@980nm	⩽ -30@1310nm	⩽ -30@1310nm
Geometrical Properties						
Cladding Diameter (μm)	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0
Coating Diameter (μm)	245.0 ± 5.0	245.0 ± 5.0	245.0 ± 5.0	400.0 ± 15.0	245.0 ± 5.0	400.0 ± 15.0
Cladding Non-circularity (%)	⩽ 1.0	⩽ 1.0	⩽ 1.0	⩽ 1.0	⩽ 1.0	⩽ 1.0
Core/Cladding Concentricity (μm)	⩽ 0.5	⩽ 0.5	⩽ 0.5	⩽ 0.5	⩽ 0.5	⩽ 0.5
Coating Type	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate
Mechanical Properties						
Operating Temperature (°C)	-45 to +85	-45 to +85	-45 to +85	-45 to +85	-45 to +85	-45 to +85
Proof Test (kpsi)	100	100	100	100	100	100

Specifications-2

Fibre Type	PM 14xx_ 125-13/250	PM 1550_ 125-13/250	PM 1550_ 125-13/400	PM 1550_ 125-13/250_BI
Part No.	PM1018-A	PM1017-C	PM1027-C	PM 1017-K
Optical Properties				
Operating Wavelength (nm)	1400 - 1490	1550	1550	1550
Cut-off Wavelength (nm)	1200 - 1380	1290 - 1520	1290 - 1520	1290 - 1520
Mode Field Diameter (μm)	9.8 ± 0.5@1450nm	10.5 ± 0.5@1550nm	10.5 ± 0.5@1550nm	9.0 ± 0.5@1550nm
Attenuation (dB/km)	⩽ 0.5	⩽ 0.5	⩽ 0.5	⩽ 0.5
Beat Length (mm)	⩽ 4.5	⩽ 5.0	⩽ 5.0	⩽ 5.0
Typical Cross Talk at 4m (dB)	⩽ -40@14xx	⩽ -40@1550nm	⩽ -40@1550nm	⩽ -40@1550nm
Cross Talk at 100m (dB)	⩽ -30@14xx	⩽ -30@1550nm	⩽ -30@1550nm	⩽ -30@1550nm
Macro-bend Loss (dB)	-	-	-	⩽ 1.0@1550nm (dia. 15mm, 10turns)
Geometrical Properties				
Cladding Diameter (μm)	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0
Coating Diameter (μm)	245.0 ± 5.0	245.0 ± 5.0	400.0 ± 15.0	245.0 ± 5.0
Cladding Non-circularity (%)	⩽ 1.0	⩽ 1.0	⩽ 1.0	⩽ 1.0
Core/Cladding Concentricity (μm)	⩽ 0.5	⩽ 0.5	⩽ 0.5	⩽ 0.5
Coating Type	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate
Mechanical Properties				
Operating Temperature (°C)	-45 to +85	-45 to +85	-45 to +85	- 45 to +85
Proof Test (kpsi)	100	100	100	100

- 010009 Rev 202205

Tapering Polarization Maintaining Fibre for Component

Characteristics

- Excellent grinding properties
- Tight geometric tolerances
- High environmental stability and reliability

Applications

- Polarization maintaining fused-fibre couplers
- Polarization-sensitive components
- Polarization maintaining device pigtails

Specifications

Fibre Type	PM 980_ 125-12/250_C	PM 1310_ 125-13/250_C	PM 14xx_ 125-13/250_C	PM 1550_ 125-13/250_C
Part No.	PM1015-A+	PM1016-C+	PM1018-A+	PM1017-C+
Optical Properties				
Operating Wavelength (nm)	980	1310	1400 - 1490	1550
Cut-off Wavelength (nm)	800 - 970	1100 - 1290	1200 - 1380	1290 - 1520
Mode Field Diameter (μm)	6.5 ± 0.5@980nm	9.0 ± 0.5@1310nm	9.8 ± 0.5@1450nm	10.5 ± 0.5@1550nm
Attenuation (dB/km)	⩽ 2.5	⩽ 0.5	⩽ 0.5	⩽ 0.5
Beat Length (mm)	3.0 - 5.0	3.5 - 6.5	4.0 - 7.5	4.5 - 8.0
Typical Cross Talk at 4m (dB)	⩽ -30@980nm	⩽ -30@1310nm	⩽ -30@14xx	⩽ -30@1550nm
Cross Talk at 100m (dB)	⩽ -25@980nm	⩽ -25@1310nm	⩽ -25@14xx	⩽ -25@1550nm
Geometrical Properties				
Cladding Diameter (μm)	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0	124.5 ± 1.0
Coating Diameter (μm)	245.0 ± 5.0	245.0 ± 5.0	245.0 ± 5.0	245.0 ± 5.0
Cladding Non-circularity (%)	⩽1.0	⩽ 1.0	⩽ 1.0	⩽ 1.0
Core/Cladding Concentricity (μm)	⩽0.5	⩽ 0.5	⩽ 0.5	⩽ 0.5
Coating Type	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate	Dual-layer UV-acrylate
Mechanical Properties				
Operating Temperature (°C)	-45 to +85	-45 to +85	-45 to +85	-45 to +85
Proof Test (kpsi)	100	100	100	100

- 010009 Rev 202205