Passive Fiber

Everfoton's Single/Double-cladding Passive Matched Fiber is used for the processing, assembly, and connection of optical devices related to fiber lasers. This series of optical fiber can accurately match the double-cladding active fiber and significantly improve the splicing efficiency with the double-cladding active fiber. The multi-mode fiber with large core and high NA can be used for pumping source output and power output.

Characteristics

- Precise geometry control
- Low NA to ensure single-mode output
- Lower splicing loss

Applications

- Pulse / CW fiber laser / Amplifier
- Fiber combiner
- Pigtail output
- FBG

Specifications-1

Fiber Type	GDF_DC 34/90-0.095	GDF_SC 10/125-0.08	GDF_DC 10/130-0.08	GDF_SC 20/130-0.08	GDF_DC 20/130-0.08	GDF_DC 14/250-0.07	GDF_DC 25/250-0.085	GDF_DC 25/250-0.11
Part No.	DG1113-G	SG1010-C	DG1110-A	SG1011-A	DG1111-A	DG1110-C	DG1112-A	DG1112-D
Optical Properties								
Operating Wavelength (nm)	1060 ~ 1110						900 ~ 1600	
Core NA	0.095±0.005	0.08±0.005	0.08±0.005	0.08±0.005	0.08±0.005	0.070±0.005	0.085±0.005	0.11±0.01
Cladding NA	≥0.46	-	≥0.46	-	≥0.46	≥0.46	≥0.46	≥0.46
Core Attenuation @1300nm (dB/km)	≤10.0	≤40.0	≤40.0	≤40.0	≤40.0	≤45.0	≤45.0	≤45.0
Core Attenuation @1200nm (dB/km)	≤10.0	≤20.0	≤20.0	≤20.0	≤20.0	≤20.0	≤45.0	≤30.0
Cladding Attenuation @1095nm (dB/km)	≤10.0	-	≤15.0	-	≤15.0	≤15.0	≤15.0	≤15.0
Geometrical/Mechanical Properties								
Core Diameter (μm)	35.0±1.5	11.0±1.0	11.0±1.0	20.0±1.5	20.0±1.5	14.0±1.5	25.0±1.5	25.0±1.5
Cladding Diameter (μm)	90.0±1.5	125.0±1.0	130.0±1.0	130.0±2.0	130.0±1.0	247.0±3.0	247.0±3.0	247.0±3.0
Coating Diameter (μm)	190.0±15.0	245.0±10.0	245.0±10.0	245.0±10.0	245.0±10.0	395.0±15.0	395.0±15.0	395.0±15.0
Core/Cladding Concentricity (μm)	≤0.5	≤0.7	≤0.7	≤0.7	≤0.7	≤2.0	≤2.0	≤2.0
Cladding Non-circularity (%)	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100	≥100	≥100

* Single-cladding fiber products available on request

Specifications-2

Fiber Type	GDF_SC 30/250-0.065	GDF_DC 30/250-0.065	GDF_DC 30/250-0.075	GDF_DC 34/250-0.075	GDF_DC 34/250-0.11
Part No.	SG1011-C	DG1113-A	DG1113-E	DG1113-H	DG1113-C
Optical Properties					
Operating Wavelength (nm)	1060 ~ 1110				900 ~ 1600
Core NA	0.065±0.005	0.065±0.005	0.075±0.005	0.075±0.005	0.11±0.01
Cladding NA	-	≥0.46	≥0.46	≥0.46	≥0.46
Core Attenuation @1300nm (dB/km)	≤40.0	≤45.0	≤45.0	≤15.0	≤45.0
Core Attenuation @1200nm (dB/km)	≤10.0	≤30.0	≤30.0	≤20.0	≤30.0
Cladding Attenuation @1095nm (dB/km)	-	≤15.0	≤15.0	≤15.0	≤15.0
Geometrical/Mechanical Properties					
Core Diameter (μm)	30.0±1.5	30.0±1.5	30.0±1.5	34.0±1.5	35.0±1.5
Cladding Diameter (μm)	247.0±3.0	247.0±3.0	247.0±3.0	247.0±3.0	247.0±3.0
Coating Diameter (μm)	395.0±15.0	395.0±15.0	395.0±15.0	395.0±15.0	395.0±15.0
Core/Cladding Concentricity (μm)	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0
Cladding Non-circularity (%)	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100

* Single-cladding fiber products available on request

Specifications-3

Fiber Type	GDF_DC 20/400-0.065	GDF_DC 25/400-0.065	GDF_DC 25/400-0.11	GDF_DC 30/400-0.06	GDF_DC 34/400-0.065	GDF_DC 50/400-0.11	GDF_DC 50/400-0.12
Part No.	DG1111-C	DG1112-B	DG1112-C	DG1113-B	DG1113-J	DG1115-B	DG1115-E
Optical Properties							
Operating Wavelength (nm)	1060 ~ 1110						
Core NA	0.065±0.005	0.065±0.005	0.11±0.01	0.06±0.005	0.065±0.005	0.11±0.01	0.12±0.01
Cladding NA	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46
Core Attenuation @1300nm (dB/km)	≤20.0	≤20.0	≤12.0	≤20.0	≤15.0	≤20.0	≤40.0
Core Attenuation @1200nm (dB/km)	≤15.0	≤15.0	≤8.0	≤15.0	≤15.0	≤15.0	≤20.0
Cladding Attenuation @1095nm (dB/km)	≤15.0	≤15.0	≤15.0	≤15.0	≤15.0	≤15.0	≤15.0
Geometrical/Mechanical Properties							
Core Diameter (μm)	20.0±1.5	25.0±1.5	25.0±1.5	30.0±2.0	34.0±1.5	50.0±1.5	50.0±2.0
Cladding Diameter (μm)	395.0±5.0	395.0±5.0	395.0±5.0	400.0±5.0	395.0±5.0	395.0±5.0	395.0±5.0
Coating Diameter (μm)	550.0±15.0	550.0±15.0	550.0±15.0	550.0±15.0	550.0±15.0	550.0±15.0	550.0±15.0
Core/Cladding Concentricity (μm)	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0
Cladding Non-circularity (%)	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5	≤0.5
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100	≥100

* Single-cladding fiber products available on request

Specifications-4

Fiber Type	GDF_DC 30/600 -0.06	GDF_DC 50/600 -0.065	GDF_DC 50/800 -0.065	GDF_DC 100/400 -0.12	GDF_DC 200/360 -0.12	GDF_DC 300/540 -0.12	GDF_DC 400/650 -0.1
Part No.	DG1113-I	DG1115-F	DG1115-G	DG1116-B	DG1117-A	DG1117-B	DG1117-C
Optical Properties							
Operating Wavelength(nm)	1060 ~ 1110						
Core NA	0.06±0.005	0.065±0.005	0.065±0.005	0.12±0.01	0.12±0.01	0.12±0.01	0.095±0.005
Cladding NA	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46
Core Attenuation @1300nm (dB/km)	-	≤15.0	-	-	≤40.0	-	-
Core Attenuation @1200nm (dB/km)	≤10.0	≤15.0	≤30.0	-	≤20.0	≤20.0	≤30 .0
Cladding Attenuation @1095nm (dB/km)	-	≤20.0	-	≤25.0	≤15.0	-	-
Geometrical/Mechanical Properties							
Core Diameter (μm)	30.0±1.5	50.0±2.0	50.0±2.0	100.0±2.0	200.0±2.0	300.0±5.0	400.0±3.0
Cladding Diameter (μm)	600.0±10.0	600.0±7.0	800.0±10.0	400.0±5.0	360.0±3.0	540.0±10.0	650.0±5.0
Coating Diameter (μm)	825.0±20.0	760.0±15.0	970.0±15.0	550.0±15.0	540.0±15.0	650.0±20.0	800.0±20.0
Core/Cladding Concentricity (μm)	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤3.0
Cladding Non-circularity (%)	≤0.5	≤0.5	-	≤0.5	≤0.5	≤1.0	≤1.0
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100	≥100

* Single-cladding fiber products available on request

Specifications-5

Fiber Type	SI 105/ 125-22/ 250 (PSC)	SI 135/ 155-22/ 320(PSC)	SI 200/ 220-22/ 320(PSC)	SI 220/ 242-22/ 330(PSC)	SI 300/ 330-22/ 500(PSC)	SI 400/ 440-22/ 730(PSC)
Part No.	SI2014-N	SI2014-O	SI2014-A	SI2015-B	SI2014-X	SI2024-G
Optical Properties						
Operating Wavelength (nm)	800~1600					
Core NA	0.22±0.02	0.22±0.02	0.22±0.02	0.22±0.02	0.22±0.02	0.22±0.02
Core Attenuation @1300nm (dB/km)	≤8.0	≤40.0	-	-	-	-
Core Attenuation @1200nm (dB/km)	-	≤20.0	-	-	-	-
Geometrical/Mechanical Properties						
Core Diameter (μm)	105.0±3.0	135.0±1.5	200.0±4.0	220.0±5.0	300.0±8.0	400.0±8.0
Cladding Diameter (μm)	125.0±2.0	155.0±1.0	220.0±3.0	242.0±3.0	330.0±8.0	440.0±8.0
Coating Diameter (μm)	250.0±10.0	320.0±10.0	320.0±15.0	330.0±20.0	500.0±20.0	730.0±30.0
Core/Cladding Concentricity (μm)	≤3.0	≤2.0	≤3.0	≤3.0	≤3.0	≤3.0
Cladding Non-circularity (%)	≤2.0	≤0.5	≤2.0	≤2.0	-	-
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100
Inner Coating Material	Acrylic Resin					
Outer Coating Material	Acrylic Resin					

Specifications-6

Fiber Type	SI 135/ 155-22/ 320 (DC)	SI 200/ 220-22/ 350(DC)	SI 220/ 242-22/ 330(DC)	SI 300/ 330-22/ 500(DC)	SI 400/ 440-22/ 570(DC)	SI 400/ 480-22/ 600(DC)	SI 600/ 660-22/ 960(DC)	SI 800/ 880-22/ 1050(DC)	SI1000/ 1100-22/ 1350(DC)
Part No.	SI2110-C	SI2110-D	SI2111-A	SI2114-G	SI2116-A	SI2114-A	SI2114-B	SI2114-C	SI2114-H
Optical Properties									
Operating Wavelength (nm)	800~1600								
Core NA	0.22±0.02	0.22±0.02	0.22±0.02	0.22±0.02	0.22±0.01	0.22±0.02	0.22±0.02	0.22±0.02	0.22±0.02
Cladding NA	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46
Core Attenuation @1300nm (dB/km)	≤20.0	≤20.0	-	-	-	-	-	-	-
Core Attenuation @1200nm (dB/km)	≤15.0	≤15.0	-	-	-	-	-	-	-
Cladding Attenuation @1095nm (dB/km)	≤15.0	≤15.0	≤15.0	-	≤15.0	-	-	-	-
Geometrical/Mechanical Properties									
Core Diameter (μm)	135.0±1.5	200.0±4.0	220.0±4.0	305.0±5.0	407.5±2.5	400.0±9.0	600.0±8.0	800.0±10.0	1000.0±20.0
Cladding Diameter (μm)	155.0±1.0	220.0±3.0	242.0±3.0	330.0±5.0	440.0±6.0	480.0±8.0	660.0±10.0	880.0±10.0	1100.0±22.0
Coating Diameter (μm)	320.0±20.0	350.0±20.0	330.0±25.0	500.0±25.0	570.0±20.0	600.0±25.0	960.0±40.0	1050.0±40.0	1350.0±50.0
Core/Cladding Concentricity (μm)	≤3.0	≤3.0	≤3.0	≤3.0	≤2.0	≤5.0	≤7.0	≤10.0	≤10.0
Cladding Non-circularity (%)	≤0.5	≤0.5	≤0.5	≤1.0	≤0.5	≤0.5	≤0.5	≤0.5	≤1.0
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100	≥100	≥100	≥70
Inner Coating Material	Low Refractive Index Coating								
Outer Coating Material	Acrylic Resin								

Specifications-7

Fiber Type	SI 50/70/ 360-22/540 (DC)	SI 70/90/ 360-22/540 (DC)	SI 100/120/ 360-15/540 (DC)	SI 100/120/ 360-22/540 (DC)	SI 150/170/ 360-15/540 (DC)	SI 150/170/ 360-22/540 (DC)	SI 200/220/ 360-22/540 (DC)	SI 300/330/ 360-22/540 (DC)
Part No.	SI2113-A	SI2113-B	SI2113-F	SI2113-C	SI2113-G	SI2113-D	SI2113-E	SI2113-L
Optical Properties								
Operating Wavelength (nm)	800~1600							
Core NA	0.22±0.01	0.22±0.01	0.15±0.01	0.22±0.01	0.15±0.01	0.22±0.01	0.22±0.01	0.22±0.02
Cladding NA	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46	≥0.46
Geometrical/Mechanical Properties								
Core Diameter (μm)	52.0±2.0	72.0±2.0	102.0±2.0	102.0±2.0	152.0±2.0	152.0±2.0	204.0±4.0	306.0±5.0
Core/Cladding Concentricity (μm)	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤5.0
Core Non-circularity (%)	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0	≤2.0
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100	≥100	≥100
Inner Cladding Diameter (μm)	73.0±3.0	93.0±3.0	123.0±3.0	123.5±3.5	173.0±3.0	173.0±3.0	226.0±6.0	336.6±7.0
Outer Cladding Diameter (μm)	367.5±7.5	367.5±7.5	365.5±5.0	367.5±7.5	367.5±7.5	367.5±7.5	367.5±7.5	367.5±7.5
Coating Diameter (μm)	540.0±15.0	540.0±15.0	540.0±15.0	540.0±15.0	540.0±15.0	540.0±15.0	540.0±15.0	550.0±15.0
Inner Coating Material	Low Refractive Index Coating							
Outer Coating Material	Acrylic Resin							