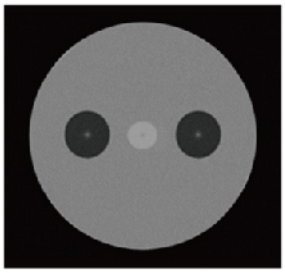
Polarization-maintaining Ytterbium-doped Fiber



Everfoton's Panda-type Polarization-maintaining Ytterbium-doped Fiber, based on advanced fiber manufacturing technologies, has excellent geometric and birefringent properties, which can effectively reduce the nonlinear effect in the optical system. As a gain fiber, it has high optical conversion efficiency and outstanding beam quality. It is widely used in ultrashort pulse precision processing, lidar and other fields.

Characteristics

- Precise control of geometric parameters
- Excellent birefringence
- High laser conversion efficiency
- Excellent beam quality

Applications

- Ultrashort pulse fiber amplifier and fiber laser
- Lidar
- Laser range finding
- Continuous wave fiber amplifier and fiber laser

Specifications

Fiber Type	YDF_DC 5/130(PM)	YDF_SC 6/125(PM)	YDF_DC 10/125(PM)	YDF_DC 25/250(PM)	YDF_DC 30/250(PM)	YDF_DC 20/400(PM)
Part No.	YD1113-C	YD1011-A	YD1113-A	YD1111-F	YD1111-E	YD1113-B
Optical Properties						
Operating Wavelength (nm)	1030 ~ 1115					
Cladding Attenuation@1095nm (dB/km)	-	-	≤20	≤20	≤20	≤20
Core Absorption@915nm (dB/m)	-	85.0±10.0	-	-	-	-
Core Absorption@975nm (dB/m)	-	250.0±30.0	-	-	-	-
Cladding Pump Absorption @915nm (dB/m)	0.60±0.10	-	1.90±0.40	1.60±0.20	1.80±0.20	0.50±0.10
Cladding Pump Absorption@975nm (dB/m)	1.80±0.30	-	6.20±0.80	4.80±0.60	5.30±0.60	1.50±0.30
Core NA	0.12±0.01	0.11±0.01	0.075±0.05	0.06±0.01	0.06±0.01	0.06±0.005
Inner Cladding NA	≥0.46	-	≥0.46	≥0.46	≥0.46	≥0.46
Geometrical/Mechanical Properties						
Core Diameter (μm)	5.0±1.0	6.0±1.0	10.0±2.0	25.0±3.0	30.0±3.0	20.0±2.0
Inner Cladding Diameter (μm)	125.0±3.0	125.0±3.0	125.0±3.0	250.0±5.0	250.0±5.0	400.0±10.0
Coating Diameter (μm)	245.0±15.0	245.0±15.0	245.0±15.0	400.0±15.0	400.0±15.0	550.0±15.0
Inner Cladding Shape (N/A)	Circular	Circular	Circular	Circular	Circular	Circular
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100