

Green Transmission Fiber

Everfoton Green Transmission Fiber is fabricated from special materials to meet the demands of green laser applications. Featuring a high-hydroxyl silica core structure and operating in the wavelength range of approximately 490-580 nm, it leverages high brightness, small spot size, and unique material absorption characteristics for wide use in industrial processing, scientific research, and medical fields. The fiber can be customized in geometric dimensions and numerical aperture to suit specific application requirements.

Characteristics

- High beam quality
- High power output
- High electro-optical conversion efficiency
- Industrial reliability

Applications

- New energy batteries
- Precision micro-machining
- Scientific research and medical
- Display and communications
- Laser guidance

Specifications

Fiber Type	UV 50/55-22/110(DC)	UV 50/125-22/250(DC)	UV 100/120-22/240(DC)	UV 135/160-22/320(DC)	UV 200/220-22/320(DC)	UV 365/400-22/730(DC)	UV 550/600-22/1040(DC)	UV 910/1000-22/1300(DC)
Part No.	UV2110-D	UV2111-A	UV2112-A	UV2110-B	UV2110-C	UV2110-E	UV2110-F	UV2110-A
Optical Properties								
Operating Wavelength (nm)	490~580							
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	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
Fiber Refractive Index Structure	Step Index	Step Index	Step Index	Step Index	Step Index	Step Index	Step Index	Step Index
Geometrical Properties								
Core Diameter (μm)	50.0±2.0	50.0±2.0	100.0±3.0	135.0±4.0	200.0±3.0	365.0±8.0	550.0±10.0	910.0±10.0
Cladding Diameter (μm)	55.0±3.0	125.0±3.0	120.0±5.0	160.0±5.0	220.0±5.0	400.0±10.0	600.0±15.0	1000.0±15.0
Core/Cladding Concentricity (μm)	≤1.0	≤1.0	≤1.0	≤1.0	≤1.0	≤5.0	≤7.0	≤15.0
Coating Diameter (μm)	110.0±15.0	250.0±15.0	240.0±20.0	320.0±20.0	320.0±45.0	730.0±30.0	1040.0±30.0	1300.0±50.0
Material Properties								
Core Material	High-OH Pure Silica							
Cladding Material	Fluorine-doped Silica							
Inner Coating Material	Low Refractive Index Coating							
Outer Coating Material	Acrylate	Acrylate	Acrylate	Acrylate	Acrylate	Acrylate	Acrylate	Acrylate
Operating Temperature (°C)	-40~+80	-40~+80	-40~+80	-40~+80	-40~+80	-40~+80	-40~+80	-40~+80
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100	≥100	≥75

*The E in the fiber type indicates that the outer material is ETFE