

Medical Fiber

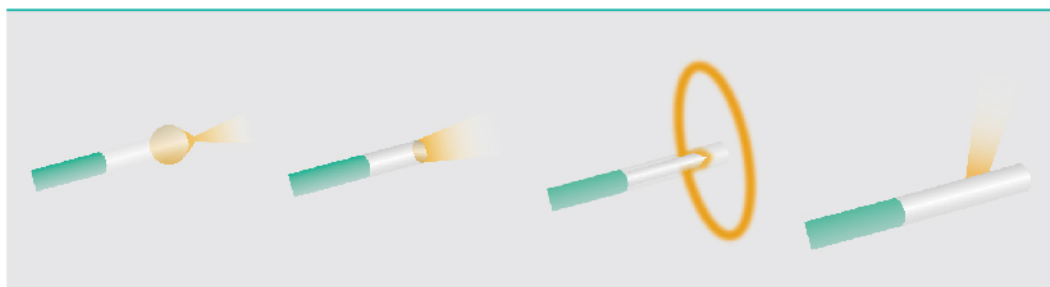
Everfoton's Medical Fiber with a large core diameter and multi-cladding energy transmission is designed to popularize the applications related to minimally invasive medical cosmetology. Relying on YOFC's excellent specialty cable processing technology, we can also provide customers with overall manufacturing solutions for energy transmission fiber patchcords.

Characteristics

- Ultra-low insertion loss
- High strength and not easy to break
- Excellent bending resistance
- Excellent biocompatibility

Applications

- Medical imaging diagnosis
- Neurosurgery
- Laser tissue resection/Ablation/Lithotripsy, etc.
- Optical imaging
- Medical device manufacturing



Specifications-1

Fiber Type	SI 150/190-22/370E(DC)	SI 200/240-22/365E (DC)	SI 272/300-22/400E (DC)	SI 365/400-22/550E(DC)	SI 550/600-22/750E(DC)	SI 800/840-22/900E (DC)
Part No.	SI2141-A	SI2141-E	SI2141-F	SI2141-C	SI2141-D	SI2141-G
Optical Properties						
Operating Wavelength (nm)	800~2200					
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
Cladding NA	≥0.37	≥0.37	≥0.37	≥0.37	≥0.37	≥0.37
Core Attenuation@2140nm (dB/km)	≤100	≤100	≤100	≤100	≤100	≤100
Hydroxyl Content	Low OH	Low OH	Low OH	Low OH	Low OH	Low OH
Fiber Refractive Index Structure	Step Index	Step Index	Step Index	Step Index	Step Index	Step Index
Geometrical/Mechanical Properties						
Core Diameter (μm)	150.0±3.0	200.0±3.0	272.0±5.0	365.0±8.0	550.0±10.0	800.0±10.0
Cladding Diameter (μm)	190.0±4.0	240.0±5.0	300.0±6.0	400.0±8.0	600.0±10.0	840.0±10.0
Coating Diameter (μm)	220.0±10.0	275.0±10.0	330.0±10.0	430.0±10.0	640.0±10.0	890.0±10.0
Tight Cladding Diameter (μm)	362.5±12.5	365.0±20.0	400.0±25.0	550.0±25.0	750.0±30.0	1015.0±25.0
Core/Cladding Concentricity (μm)	≤3.0	≤3.0	≤3.0	≤5.0	≤5.0	≤5.0
Proof Test (kpsi)	≥100	≥100	≥100	≥100	≥100	≥100
Core Material	Pure Silica					
Cladding Material	Fluorine-doped Silica					
Coating Material	Low Refractive Index Coating					
Tight Cladding Material/Color	ETFE/Blue	ETFE/Blue	ETFE/Blue	ETFE/Blue	ETFE/Blue	ETFE/Blue
Operating Temperature (°C)	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85	-40~+85

Specifications-2

Fiber Type	SI 242/278-27/480E(DC)
Part No.	SI2141-H
Optical Properties	
Operating Wavelength (nm)	800~2200
Core NA	0.27±0.02
Cladding NA	≥0.46
Hydroxyl Content	Low OH
Fiber Refractive Index Structure	Step Index
Geometrical/Mechanical Properties	
Core Diameter (μm)	242.0±5.0
Cladding Diameter (μm)	278.0±5.0
Coating Diameter (μm)	360.0±15.0
Tight Cladding Diameter (μm)	480.0±20.0
Core/Cladding Concentricity (μm)	≤2.0
Proof Test (kpsi)	≥100
Core Material	Pure Silica
Cladding Material	Fluorine-doped Silica
Coating Material	Low Refractive Index Coating
Tight Cladding Material/Color	ETFE/Blue
Operating Temperature (°C)	-40 ~ +85