Fluoride single mode ZBLAN fiber patch cord 0.3-4.50um (core diameter 8.5um FC/APC 1.5m long)

Product Description

ZFG fiber is a composite glass fiber composed of heavy metal fluoride. Compared with the widely used quartz fiber, ZFG fiber has the characteristics of wide transmission wavelength range of 0.3μm~4.5μm and high emission efficiency of doped rare earth ions. In the application field of

fiber lasers and amplifiers, in order to optimize their efficiency, through a unique fiber manufacturing technology, we have launched a low-cost production of high-quality (especially low-loss) fluoride fiber single-mode fiber with a specific D-type core. Customized fiber lasers and amplifiers can be designed and manufactured. Mid-IR supercontinuumLVF nonlinear single-mode fiber can achieve very flat and broadband output spectrum due to its excellent performance. (Mid-infrared supercontinuum laser) Mid-infrared spectroscopy and optical measurement. We provide a full range of ZFG fiber products to meet the needs of demanding fiber lasers, and can customize the cut-off wavelength, core diameter, cladding diameter, etc. We provide you with a full range of infrared external line solutions.

Product features

Specific D-core design、 Extremely flat and broadband output spectrum、Mid-infrared supercontinuum spectrum、Nonlinear single-mode fiber、Low loss、 High power handling capability

Part Number

MP-ZSF-8.5/125-23-FC/APC-1.5

Application area

Fiber amplifiers、 Mid-infrared supercontinuum lasers、 Medical fields、 Optical measurement and installation、 Biochemical sensing

Core parameters

Core/cladding Diameter	Numerical Aperture
8.5/125um	0.23

General Parameters

Since the discovery of ZBLAN glass in 1974, a variety of fluoride optical fibers have been developed, including ZrF 4, InF 3, and AlF 3 based fibers, designed for mid-IR applications.

Typical compositions of ZFG and IFG glasses are:

ZFG (Zirconium ZrF4 Fluoride Glass) = fluorozirconate fibers

53 ZrF4 -20 BaF2 -4 LaF3 -3 AlF3 -20 NaF

IFG (InF3 Fluoride Glass) = fluoroindate fibers

40 InF3 -20 ZnF2 -20 SrF2 -20 BaF2

They have the specificity of high transparency from UV to mid-IR: 0.22 to 7 µm and 0.255 to 8 µm for ZFG and IFG (3 mm thick sample), respectively.

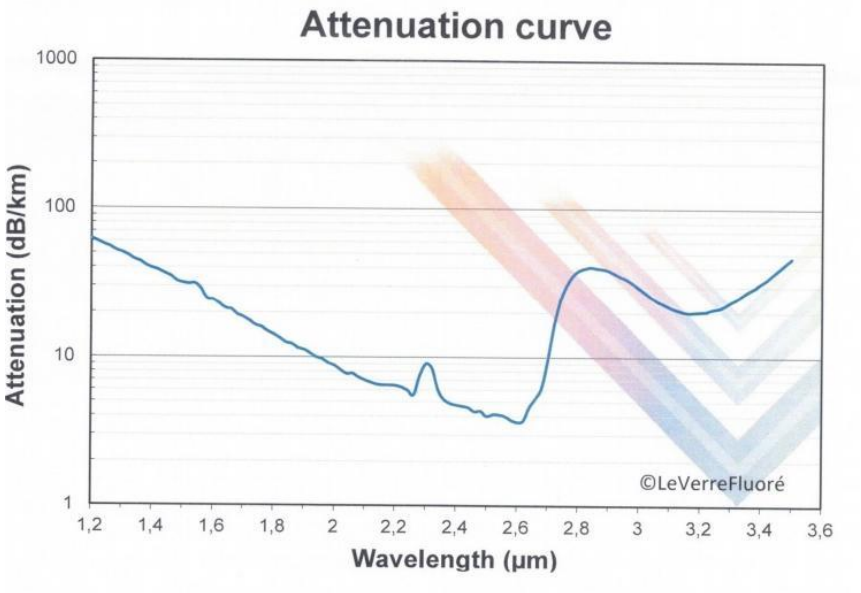
Thus, they completely cover the 3-5 µm atmospheric transparency window and partially cover the molecular fingerprinting region, paving the way for numerous passive and active applications.

Part Number parameters

Test Report

231206/OF4116-x

Câble reference	ZFG SM [2,55] TJK 2FC/APC 8,5/125 - 1,5	
Part number	231206/OF4116-x	
Core diameter	8.5 µm	
1st Cladding diameter (*)	125 µm	
2nd Claddind diameter	N/A µm	
Doping concentration (mol)	N/A	
Numerical aperture	0,23	
Cut-Off wavelength	2.55 µm	
Cable length	1.5 m	
Jacket	Kevlar Jacket	OD : 4 mm
Connectors	2 FC/APC	
Long term Bending radius	≥ 45 mm	



General parameters

Parameter characteristics

Transmission range (μm)	0.3-4.5
Typical loss (dB/Km)	<10
Fresnel reflection loss (air)	4%
Coating material	UV Curable Acrylate

Technical parameters:

PN#	MP-ZSF-6.5/125-23-FC/APC	MP-ZSF-8.5/125-23-FC/APC	MP-ZSF-7.5/150-23-FC/APC	MP-ZSF-14/150-12.5-FC/APC
Core/cladding diameter (um)	6.5/125	8.5/125	7.5/150	14/250
Numerical aperture	0.23	0.23	0.23	0.125
Cut-off wavelength (um)	1.95	2.55	2.2	2.2
Operating wavelength (um)	0.3~3.90	0.3~4.50	0.3-4.0	0.3~4.1
Short-term bending radius (mm)	≥15	≥15	≥15	≥25
Long-term bending radius (mm)	≥45	≥45	≥45	≥75

Ordering Info

Example: ZFG SM (1.95) 6.5/125

Cut-off wavelength (μm): 1.95/2.55/2.2

Numerical aperture: 0.23/0.23/0.125

Core/cladding diameter (μm): 6.5/125; 8.5/1235; 14/250

Insertion loss test curve