

DESCRIPTION

IRphotonics singlemode fiber is manufactured with the company's patented enhanced fluoride fiber manufacturing process. This process allows the fabrication of fibers with a wide range of cut-off wavelengths. Our single mode fiber has been optimised for applications requiring a precise core diameter as well as very low attenuation.

Offered in a wide range of Numerical Apertures and Core Diameters the Un-doped single mode fiber is ideal for applications requiring a precise cutoff wavelength.

FEATURES

- Transparent in UV, VIS, NIR, MID-IR
- Wide Range of NA's Available
- Wide Range of Cut-off wavelengths Available
- Wide Range of Core Diameters Available
- Wide range of Single Mode Fiber Patchcords Available
- Easy to handle, strip and cleave

APPLICATIONS

- Super Continuum Sources
- Fiber Lasers
- Instrumentation
- Industrial / Scientific Analysis

Singlemode Mid-IR Fiber



FIBER SPECIFICATIONS

- Spectral Transmission Range from 300nm to 4500 nm
- Numerical Aperture: 0.05 to 0.3
- Operating Temperature: -20°C to 90°C
- Standard Buffer Coating: Acrylate
- Proof Test Level: >50 kpsi (or higher, dependent on fiber design)
- High Power handling capability

SPECIFICATIONS

SPECIFICATION*		STANDARD FIBERS
Available Core Diameters		9 μ m
Core/Cladding Offset		Depends on core diameter
Proof Test Level		> 50 kpsi
Coating Material		Acrylate
Breaking Bend radius (125 μ m)		2 mm
Long-Term Bend Radius		50 mm
Single Mode Operating Wavelength Range		$\geq 2 \mu$ m for NA 0.17 $\geq 2.7 \mu$ m for NA 0.23
Numerical Aperture		0.17 or 0.23 +/- 0.02
Typical Loss		< 0.2 dB/m

* Custom SM fibers can be manufactured by IRphotonics on request.

ORDERING INFORMATION

1st) Indicate the product code:

BARE FIBER ORDERING			
S	YYY	S	XX
	Standard Core Diameter		NA= 0.xx
S	009	S	17
S	009	S	23

TO USE FOR SINGLEMODE PATCHCORD ORDERING		
I	O	J
Connector In	Connector Out	Jacket
F = FC/PC	F = FC/PC	P = PVDF
A = FC/APC	A = FC/APC	
S = SMA	S = SMA	

2nd) Indicate the desired fiber length in meters: **L = x m** (1 to 10 meters as Standard)

Examples:

S009S17 with L = 5 m for a 5m long 9/125um NA 0.17 bare fiber

S009S23FFP with L = 2m for a 2 m long 9/125um fiber in PVDF jacket with FC/PC connectors.

IRPHOTONICS CUSTOMIZATION PROGRAM

If you have any unique requirements, please contact us to discuss tailoring a product or design to optimize optical performance for your specific application. Custom NA's, dopants, fiber diameters and other specifications can be adapted to your requirements.

Contact IRphotonics for prices and availability or to obtain the name of your local representative.

IRphotonics has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation.