SingleMode
Mid InfraRed Fiber

DESCRIPTION

IRphotonics single mode 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 with a wide range of rare earth dopants this fiber is ideal for single mode applications requiring a precise cutoff wavelength.

FEATURES

- Transparent in UV, VIS, NIR, MID-IR
- Wide Range of NA's Available
- Wide Range of Rare Earth Dopants Available
- Wide Range of Dopant Concentrations Available

APPLICATIONS

- Fiber Lasers
- Spectroscopy
- Industrial / Scientific Diagnostic

FIBER SPECIFICATIONS

- Spectral Transmission Range from 300nm to 4500 nm
- Numerical Aperture: 0.10 to 0.25
- Operating Temperature: -20°C to 150°C (higher with special coating)
- Standard Buffer Coating: Acrylate
- Proof Test Level: >50 kpsi (dependent on fiber design)
- Can be (co) doped with: Er, Pr, Tm, Dy, Ho, Yb, Nd, Sm
- Dopant Concentrations: up to 50 000 ppm

IRphotonics
Advanced Infrared Materials

MECHANICAL AND GEOMETRICAL SPECIFICATIONS

Available Core Diameters	≥ 4	µm
Core/Cladding Offset	Depends on core diameter	
Coating/Cladding Offset	≤ 2	µm
Proof Test Level	> 50	kpsi
Coating Material	UV Cured, Dual Acrylate, Other	
Breaking Bend radius (125 µm)	4	mm
Long-Term Bend Radius	50	mm

OPTICAL SPECIFICATIONS

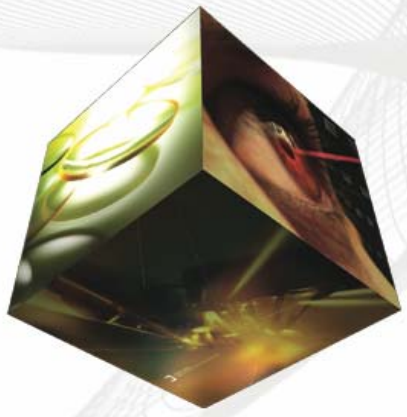
Operating Wavelength Range	0.3 to 4.5 µm
Numerical Aperture	0.10 to 0.25
Low Birefringence	

DOPANT SPECIFICATIONS

Dopants	Er, Pr, Tm, Dy, Ho, Yb, Nd, Sm
Co-Doping	Available
Concentration	up to 50 000 ppm

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.



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