

SPECIALTY OPTICAL FIBER

IXF-SM-1550-80-016

Single Mode Fiber

The IXF-SM family regroups singlemode fibers designed for operation from UV to NIR wavelengths. Available with different cladding diameter, numerical aperture, and coating material, a wide range of singlemode fibers are available.

The IXF-SM-1550-80-016 is designed for singlemode operation at 1550 nm. With a 80 μm cladding diameter and high numerical aperture, it offers low bending loss and high mechanical reliability when coiled to tight diameters.



Benefits & Features

- 1550 nm singlemode operation
- $\text{\O}80 \mu\text{m}$ cladding diameter
- High numerical aperture
- Low macrobending loss
- High mechanical reliability under tight bending
- Other diameters and coatings available upon request

Applications

- Sensing

Related Products

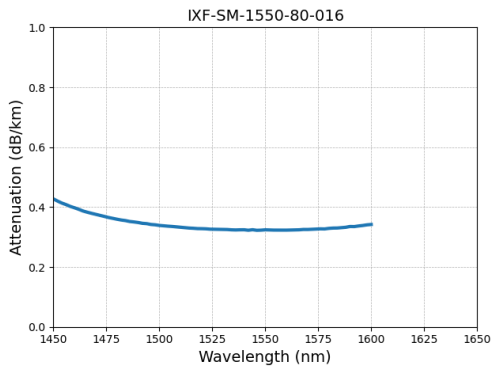
- IXF-SM-1550-60-019 $\text{\O}_{\text{clad}} 60 \mu\text{m}$, NA 0.19
- IXF-SM-1550-80-019 $\text{\O}_{\text{clad}} 80 \mu\text{m}$, NA 0.19
- IXF-SM-1550-80-022 $\text{\O}_{\text{clad}} 80 \mu\text{m}$, NA 0.22
- IXF-SM-1550-80-024-PI $\text{\O}_{\text{clad}} 80 \mu\text{m}$, Polyimide

Parameters

Cutoff wavelength (nm)	$1150 < \lambda_c < 1450$
Attenuation @1550 nm (dB/km)	< 0.4
Mode field diameter @1550 nm (μm)	8 ± 0.7
Numerical aperture	0.16 ± 0.01
Core/Clad concentricity (μm)	< 1
Cladding diameter (μm)	80 ± 1
Coating diameter (μm)	170 ± 5
Proof test level (kpsi)	100

Design parameters

Coating material	Dual acrylate
Operating temperature range ($^{\circ}\text{C}$)	-60 to $+85$
Bending loss $\text{\O}15 \text{ mm}$ @1550 nm (dB/turn)	< 0.1



Typical attenuation spectrum of the IXF-SM-1550-80-016 fiber.

Exail reserves the right to change, at any time and without notice, the specifications, design, function or form of its products described herein.

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