

SPECIALTY OPTICAL FIBER

# IXF-SM-1550-80-019

## 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-1550-80-019 is designed for singlemode operation at 1550 nm. With a 80  $\mu\text{m}$  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
- Ø80  $\mu\text{m}$  cladding diameter
- 200 kpsi proof test
- High numerical aperture
- Low macrobending loss
- High mechanical reliability under tight bending
- Other diameters and coatings available upon request

### Applications

- Sensing

### Related Products

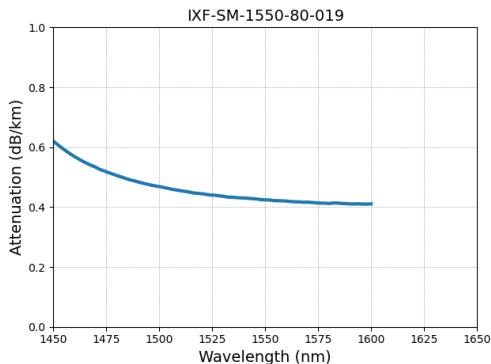
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|-------------------------|------------------------------------|
| • IXF-SM-1550-60-019    | Øclad 60 $\mu\text{m}$ , NA 0.19   |
| • IXF-SM-1550-80-016    | Øclad 80 $\mu\text{m}$ , NA 0.16   |
| • IXF-SM-1550-80-022    | Øclad 80 $\mu\text{m}$ , NA 0.22   |
| • IXF-SM-1550-80-024-PI | Øclad 60 $\mu\text{m}$ , Polyimide |

### Parameters

Cutoff wavelength (nm)	1250 < $\lambda_c$ < 1400
Attenuation @1550 nm (dB/km)	< 0.5
Mode field diameter @1550 nm ( $\mu\text{m}$ )	6.6 ± 0.5
Numerical aperture	0.19 ± 0.01
Core/Clad concentricity ( $\mu\text{m}$ )	< 1
Cladding diameter ( $\mu\text{m}$ )	80 ± 1
Coating diameter ( $\mu\text{m}$ )	170 ± 5
Proof test level (kpsi)	200

### Design parameters

Coating material	Dual acrylate
Operating temperature range (°C)	-60 to +85
Bending loss Ø15 mm @1550 nm (dB/turn)	< 0.1



Typical attenuation spectrum of the IXF-SM-1550-80-019 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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