# IXF-SM-1060-125-014-AL

## Single Mode Fiber

The IXF-SM family includes singlemode fibers designed for use in harsh environments with extreme temperatures and/or low to moderate radiation levels. Exail offers a wide range of polymer and metallic coatings well-suited for high-temperature applications.

Aluminum coated fibers offer a wide operating temperature range, from cryogenic temperatures up to +400 °C. They are also hermetic to hydrogen, mitigating hydrogen darkening in hydrogen-rich environments.





#### **Benefits & Features**

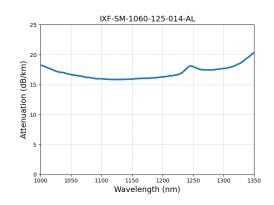
- · Singlemode operation at 1060 nm
- · Aluminum coating
- Operating temperature up to +400 °C
- · Radiation tolerant for low to moderate radiation levels
- · Matching radiation hardened fiber available
- · Hermetic to hydrogen and water vapor
- · Solderable directly to connectors
- Low splice loss to Hi1060

#### **Applications**

- · Transport fiber
- Sensing
- Distributed Temperature Sensing (DTS)

#### **Related Products**

•	IXF-RAD-SM-1060-014-AL	Rad-Hard fiber
•	IXF-SM-1550-125-014-AL	1550 nm, NA 0.14
	IXF-SM-1550-125-019-AL	1550 nm, NA 0.19



Typical attenuation spectrum of the IXF-SM-1060-125-014-AL fiber.

#### **Parameters**

Cutoff wavelength (nm)	≤ 1000
Attenuation @1060 nm (dB/km)	≤ 20
Mode field diameter @1060 nm (µm)	6.2 ± 0.5
Numerical aperture	0.14 ± 0.01
Core/Clad concentricity (µm)	≤ 1
Cladding diameter (µm)	125 ± 2
Coating diameter (µm)	170 ± 10
Proof test level (kpsi)	100

### **Design parameters**

Operating wavelength (nm)	1000 - 1350
Coating material	Aluminum
Operating temperature range (°C)	-269 to +400
Short term bend radius (mm)	15
Long term bend radius (mm)	30



More information about the 3F2E project



