

Photonics

SM2000 Singlemode Fiber



Fibrain created a Ge-doped silica core optical fiber with a cutoff wavelength of 1700 ± 50 nm that can operate up to 2200 nm. This fiber is aimed at emerging fiber applications for the $2\mu\text{m}$ wavelength, including medical, military/aerospace and industrial fiber laser markets. The fiber length can be chosen according to the customer's needs.

APPLICATIONS

- ✓ Couplers
- ✓ Measurement devices
- ✓ Light sources

ADVANTAGES & FEATURES

- ✓ Signal transmission from 1800 nm to 2200 nm
- ✓ Easy to splice
- ✓ Low bend loss

TECHNICAL SPECIFICATIONS:

Geometrical and Mechanical Specifications	Value
Cladding Diameter	$125 \pm 1 \mu\text{m}$
Coating Diameter	$242 \pm 5 \mu\text{m}$
Core Diameter	$7 \pm 1 \mu\text{m}$
Concentricity clad to core	$\leq 0.5 \mu\text{m}$
Operating temperature range	- 40 to + 85°C
Proof test Level	≥ 100 kpsi
Optical Specifications	Value
Operating Wavelength	1800 - 2200 nm
Mode Field Diameter @ 2004 nm	$11.7 \pm 1 \mu\text{m}$
Numerical Aperture	0.18 ± 0.1
Cut-off Wavelength	1700 ± 50 nm
Typical Attenuation @ 1854 nm	2.75 dB/km
Typical Attenuation @ 2004 nm	23.75 dB/km
Bend Loss per 1 turn on 15mm diameter Mandrel @ 1854 nm	0.03 dB
Bend Loss per 1 turn on 15mm diameter Mandrel @ 2004 nm	0.1 dB

PACKAGING:

Depending on the length, the fiber can be wound on different spools.

ORDERING INFORMATION:

Series	Fiber type	Manufacturer
OTK	SM2000	FB

Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Term of Sale of the selling Fibrain subsidiary.

