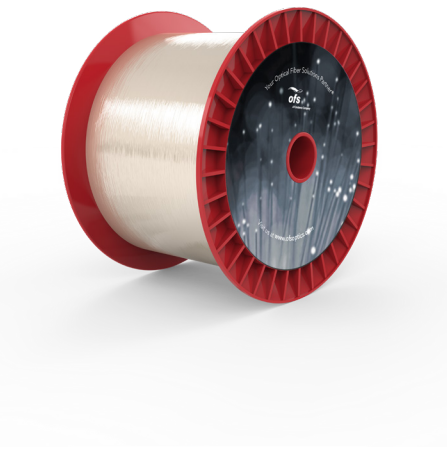
ofs
A Furukawa Company

Zero-Slope Highly Non-Linear Optical Fiber

P/N: HNLF Zero-Slope



Overview

OFS Highly-Non-Linear Optical Fiber (HNLF) combines a high non-linear coefficient with a small dispersion slope. The fiber design includes a high delta core, doped with GeO2, surrounded by a deeply depressed ring doped with fluorine.

HNLF is available in five versions: HNLF Standard with a dispersion slope of 0.019 ps/(nm^2·km), HNLF Zero-slope with a dispersion slope of 0.006 ps/(nm^2·km), HNLF-PM which is polarization maintaining, HNLF Al-Doped with an aluminum doped core for increased SBS threshold, and HNLF-SPINE (Stable Phase-matching for Improved Nonlinear Efficiency) with a zero dispersion wavelength that is very stable along the fiber length. All are available with wide range dispersion values.

Typical Applications

Non-Linear Loop Mirror

Optical Regeneration

Optical Sampling

Parametric Amplification

Photosensitive Fiber for Writing of UV-Gratings

Pulse Compression

Supercontinuum Generation

Wavelength Conversion

Zero-Slope Highly Non-Linear Optical Fiber

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Product Specifications	
Product Description	**Zero-Slope Highly-Non-Linear Optical Fiber**
Optical Characteristics	
Type	Non-Standard
Fiber Length	50 to 2000 m
Fiber Length Tolerance	± 3 m
Cutoff Wavelength	< 1300 nm
Effective Area (Typical)	12.4 μm^2
Dispersion	-1.0 to +1.5 ps/(nm·km)
Dispersion Slope	0.006 ± 0.004 ps/(nm^2·km)
PMD	≤ 0.20 ps/√km
Attenuation	≤ 0.90 dB/km
Attenuation (Typical)	0.8 dB/km
Splice Loss to SSMF Pigtail	≤ 0.20 dB
Splice Loss to SSMF Pigtail (Typical)	0.10 dB
PM or non-PM	non-PM
Non-Linear Coefficient (Typical)	10.8 W^{-1}·km^{-1}

Ordering Information for HNLF Zero Slope Module

Short (1-2 meter) Standard Single-Mode (SSMF) pigtails with connectors are spliced to the HNLF. The fiber with pigtails is delivered on a 29 x 175 mm spool covered with a protective layer of silicone glue.

Ordering Code: HNLF-ZS-LLLL-P-M-DD

Length Code (LLLL)	Length in step of 50 meters (0050, 0100, 0150, .. 2000)
Pigtail Option (P)	Pigtail Type
1 =	SSMF with FC/APC Connectors
2 =	SSMF with FC/PC Connectors
Mechanical Option (M)	Mechanical Package
1 =	29x175 mm spool with silicone glue
2 =	29x175 mm spool without silicone glue
Dispersion Code (DD)	Dispersion at 1550 nm (ps/nm·km)
z0 =	0.0 ± 1.0
p1 =	1.0 ± 1.0

Ordering Information for HNLF Zero Slope Fiber

The HNLF can also be delivered on a spool without pigtails and silicone. Please note that a splice loss of about 1 dB from HNLF to SSMF must be expected when using standard fusion splicers.

Item Number	Dispersion at 1550 nm (ps/nm·km)
80413z0	0.0 ± 1.0
80413p1	1.0 ± 1.0

For additional information please contact your sales representative.

You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.

FURUKAWA ELECTRIC GROUP

For a full list of our certifications, visit our website.

RoHS Compliant EU Directive 2002/95/EC

OFS Marketing Communications
Date: 12/22