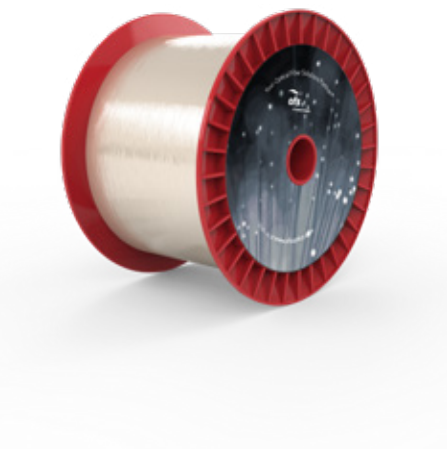
ofs
A Furukawa Company

Aluminum-Doped Highly Non-Linear Optical Fiber

P/N: HNLF Al-Doped



Overview

OFS Highly-Non-Linear Optical Fiber (HNLF) combines a high non-linear coefficient with numerical small group velocity dispersion. The fiber design includes a high delta core, surrounded by a deeply depressed ring and is doped with Fluorine.

HNLF is available in four versions: a version with a slope of 0.019 ps/(nm^2·km), a zero dispersion slope version, a PM version, and a version with aluminum-doped core for increased SBS threshold. All are available in a 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

Aluminum-Doped Highly Non-Linear Optical Fiber

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Product Specifications	
Product Description	**Al-Doped Highly-Non-Linear Optical Fiber**
Optical Characteristics	
Type	Non-Standard
Fiber Length	50 to 500 m
Fiber Length Tolerance	± 3
Cutoff Wavelength	< 1500 nm
Effective Area (Typical)	15.2 μm^2
Dispersion	-2.0 to +2.0 ps/(nm·km)
Dispersion Slope (Typical)	0.024 ps/(nm^2·km)
PMD	≤ 0.70 ps/√km
Attenuation	≤ 7.0 dB/km
Typical Attenuation	6.2
Splice Loss to SSMF Pigtail	≤ 0.65 dB
Splice Loss to SSMF Pigtail (Typical)	0.5 dB
SBS Threshold x Effective Length	86 (typical) W·m
Non-Linear Coefficient (Typical)	6.9 W^{-1}·km^{-1}

Ordering Information for HNLF Al-Doped 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-AL-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)
m1 =	-1.0 ± 1.0
z0 =	0.0 ± 1.0
p1 =	1.0 ± 1.0

Ordering Information for HNLF Al-Doped Fiber	
The HNLF fiber can also be delivered without pigtails on a 105 x 265 mm spool without any silicone. However, please note that 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)
80415m1	-1.0 ± 1.0
80415z0	0.0 ± 1.0
80415p1	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.

OFS Marketing Communications
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