Photosensitive Single-Mode Fibers

Nufern photosensitive fibers are designed to reduce grating-writing times associated with industry-standard telecommunication fiber and can be easily spliced. These photosensitive fibers provide cost-savings for grating-writing because customers can write highly repeatable, quality gratings in a short time.

Typical Applications

- WDM
- Gain flattening filters
- Dispersion compensators
- Pump stabilizers

Features & Benefits

- Enhanced photosensitivity — Shorter grating writing time
- Mode-matched to transmission fibers — Low splice loss
- Tightly controlled specifications — Excellent uniformity

Optical Specifications	**GF1**	**GF1AA**	**GF3**	**GF1B**
Operating Wavelength	1500 – 1600 nm	1500 – 1600 nm	1500 – 1600 nm	1500 – 1600 nm
Core NA	0.130	0.130	0.160	0.130
Mode Field Diameter	9.3 ± 0.5 µm @ 1310 nm 10.5 ± 1.0 µm @ 1550 nm	10.5 ± 0.8 µm @ 1550 nm	7.5 ± 0.5 µm @ 1550 nm	10.4 ± 0.8 µm @ 1550 nm
Cutoff	1260 ± 75 nm	1350 ± 100 nm	1350.00 ± 50.00 nm	1260 ± 100 nm
Core Attenuation	N/A	N/A	N/A	≤ 0.50 dB/km @ 1550 nm
Geometrical & Mechanical Specifications				
Cladding Diameter	125.0 ± 1.5 µm	125.0 ± 1.5 µm	125.0 ± 1.0 µm	125.0 ± 1.0 µm
Core Diameter	9.0 µm	8.5 µm	7.0 µm	9.0 µm
Coating Diameter	250.0 ± 20.0 µm	250.0 ± 20.0 µm	245.0 ± 15.0 µm	245.0 ± 15.0 µm
Coating Concentricity	< 5.0 µm	< 5.0 µm	< 5.00 µm	< 5.0 µm
Core/Clad Offset	≤ 0.50 µm	≤ 1.00 µm	≤ 0.50 µm	≤ 0.50 µm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
Operating Temperature Range	-55 to 85 °C	-55 to 85 °C	-55 to 85 °C	-55 to 85 °C
Short Term Bend Radius	≥ 12 mm	≥ 12 mm	≥ 12 mm	≥ 12 mm
Long Term Bend Radius	≥ 25 mm	≥ 25 mm	≥ 25 mm	≥ 25 mm
Prooftest Level	≥ 100 kpsi (0.7 GN/m²)	≥ 100 kpsi (0.7 GN/m²)	≥ 100 kpsi (0.7 GN/m²)	≥ 100 kpsi (0.7 GN/m²)

NUFERN

7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • www.nufern.com •
Nufern products are manufactured under an ISO 9001:2008 certified quality management system.

RoHS

JAPAN DEVICE
日本デバイス株式会社 E-mail sales@j-device.com
www.j-device.com Tel 03-6262-3424 Fax 03-6800-5883