



1310/1550 nm Select Cutoff Single-Mode Fibers

Nufern's 1310B-HP and 1310B-HP-V0 high-performance Select Cutoff single-mode fibers are optimized for dual wavelength applications at 1310 and 1550 nm and feature reduced bend sensitivity in the key 1550 nm band, while maintaining low splice loss to industry standard SMF-28™ fiber. Also available with 900 micron V-0 flame rated PVDF secondary buffer in accordance with UL94 in 12 standard colors and with customer specific printing on request. These fibers have virtually no buffer shrinkage over - 40°C to + 85°C operating temperature.

Typical Applications

- 1310 and 1550 nm components
- Pigtailling in small form metro components

Features & Benefits

- Tightly controlled cutoff wavelength — Reduced bend loss at 1550 nm
- Mode matched to SMF-28 — Low splice loss to standard fibers
- Printing available — Customer specific for serialization
- PVDF secondary coating — Flame retardant buffer, with virtually no temperature shrinkage

Optical Specifications

Operating Wavelength
Core NA
Mode Field Diameter

1310B-HP

1300 – 1625 nm
0.130
8.6 ± 0.5 μm @ 1310 nm
9.7 ± 0.5 μm @ 1550 nm
1260 ± 30 nm
≤ 0.5 dB/km @ 1310 nm
≤ 0.5 dB/km @ 1550 nm

1310B-HP-V0

1300 – 1625 nm
0.130
8.6 ± 0.5 μm @ 1310 nm
9.7 ± 0.5 μm @ 1550 nm
1260 ± 30 nm
≤ 0.5 dB/km @ 1310 nm
≤ 0.5 dB/km @ 1550 nm

Geometrical & Mechanical Specifications

Cladding Diameter
Core Diameter
Coating Diameter
Coating Concentricity
Core/Clad Offset
Coating Material
First Buffer Diameter
Buffer Concentricity
First Buffer Material

| | |
|-------------------------|--------------------------------------|
| 125.0 ± 1.0 μm | 125.0 ± 1.0 μm |
| 8.5 μm | 8.5 μm |
| 245.0 ± 15.0 μm | 245.0 ± 15.0 μm |
| < 5.0 μm | < 5.0 μm |
| ≤ 0.50 μm | ≤ 0.50 μm |
| UV Cured, Dual Acrylate | UV Cured, Dual Acrylate |
| N/A | 900.0 ± 50.0 μm |
| N/A | ≤ 85 μm |
| N/A | PVDF - Meets UL 94 V-0 Specification |

Operating Temperature Range
Short Term Bend Radius
Long Term Bend Radius
Proof Test Level

| | |
|-------------------------------------|-------------------------------------|
| -55 to 85 °C | -40 to 85 °C |
| ≥ 6 mm | ≥ 6 mm |
| ≥ 13 mm | ≥ 13 mm |
| ≥ 200 kpsi (1.4 GN/m ²) | ≥ 200 kpsi (1.4 GN/m ²) |



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Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.

