



# Polarization Maintaining Low Loss Coupler Fibers

Nufern's broad line of PM fibers now includes PM980C-HP & PM14XXC-HP coupler fibers. Components designed with these new coupler fibers exhibit insertion losses up to one order of magnitude better than was previously possible. These fibers also demonstrate superior polarization control in coupler applications, resulting in increased system and network efficiencies.

## Typical Applications

- Couplers and combiners
- Pump combiners
- Raman gain modules

## Features & Benefits

- Dramatically reduced insertion loss — Lower system cost
- High proof test (200kpsi) — Low risk of mechanical handling failure
- High fatigue failure resistance — Longest service life

### Optical Specifications

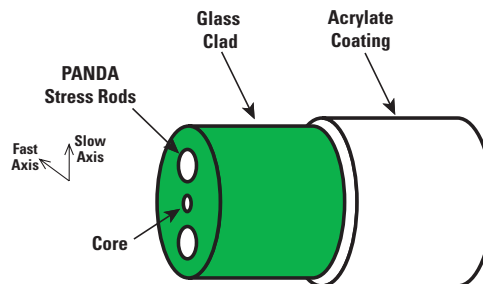
Operating Wavelength	970 - 1550 nm	1390 - 1625 nm
Mode Field Diameter	6.6 ± 1.0 μm @ 980 nm	9.8 ± 0.8 μm @ 1450 nm
Mode Field Diameter		10.4 ± 0.8 μm @ 1550 nm
Second Mode Cut-Off	900 ± 70 nm	1320 ± 60 nm
Attenuation	≤ 2.5 dB/km @ 980 nm	≤ 1 dB/km @ 1450 nm
Attenuation		≤ 1 dB/km @ 1550 nm
Normalized Cross Talk at 2 m	≤ -37 dB @ 980 nm	≤ -37 dB @ 1550 nm
Normalized Cross Talk (nominal) at 100 m	≤ -20 dB @ 980 nm	≤ -20 dB @ 1500 nm

### PM980C-HP

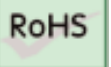
### PM14XXC-HP

### Geometrical & Mechanical Specifications

Clad Diameter	125 ± 1 μm	125 ± 1 μm
Coating Diameter	245 ± 15 μm	245 ± 15 μm
Core-Clad Concentricity	< 0.5 μm	< 0.5 μm
Coating/Clad Offset	≤ 5 μm	≤ 5 μm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
Operating Temperature	- 40 to + 85°C	- 40 to + 85°C
Proof Test Level	≥ 200 kpsi (1.4 GN/m <sup>2</sup> )	≥ 200 kpsi (1.4 GN/m <sup>2</sup> )



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Nufern products are manufactured under an ISO 9001:2000 certified quality management system.



Standard specifications and design parameters are listed above. 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.