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	**PM980C-HP**	**PM14XXC-HP**
Operating Wavelength	970 – 1550 nm	1390 – 1625 nm
Core NA	0.120	0.125
Mode Field Diameter	6.6 ± 1.0 µm @ 980 nm	9.8 ± 0.8 µm @ 1450 nm 10.4 ± 0.8 µm @ 1550 nm
Cutoff	900 ± 70 nm	1320 ± 60 nm
Core Attenuation	≤ 2.5 dB/km @ 980 nm	≤ 1.0 dB/km @ 1450 nm ≤ 1.0 dB/km @ 1550 nm
Normalized Cross Talk	≤ - 37.0 dB at 2 m @ 980 nm ≤ - 20.0 dB at 100 m @ 980 nm	≤ - 37.0 dB at 2 m @ 1550 nm ≤ - 20.0 dB at 100 m @ 1550 nm
Geometrical & Mechanical Specifications		
Cladding Diameter	125.0 ± 1.0 µm	125.0 ± 1.0 µm
Core Diameter	5.5 µm	8.0 µm
Coating Diameter	245.0 ± 15.0 µm	245.0 ± 15.0 µm
Coating Concentricity	< 5.0 µm	< 5.0 µm
Core/Clad Offset	≤ 0.50 µm	≤ 0.50 µm
Coating Material	UV Cured, Dual Acrylate	UV Cured, Dual Acrylate
Operating Temperature Range	-40 to 85 °C	-40 to 85 °C
Prooftest Level	≥ 200 kpsi (1.4 GN/m²)	≥ 200 kpsi (1.4 GN/m²)

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

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.