

POLARIZATION-MAINTAINING FIBER

Specification Sheet

ClearLite Polarization-Maintaining Photonic Fibers

CL TRUEPHASE 980 MICRO FIBER



Polarization-Maintaining

Product Description

OFS Specialty Photonics Division offers a full line of ClearLite Polarization-Maintaining Photonic Fibers, including this TruePhase fiber with 80 μm diameter cladding at the 980 nm wavelength, with 165 μm dual-coat acrylate. TruePhase 980 Micro Fiber is designed for use in integrated EDFA modules. The fiber can be used to pigtail 980 pumps and to construct PM pump combiners or PM pump/signal WDM couplers.

TruePhase fibers utilize industry-standard, stress-applying parts (SAPs) to create two axes in the core, each of which guides light at a different velocity. Crosstalk between the two axes (slow and fast) is suppressed so that polarized light launched into either of the axes will remain polarized as it is guided.

Precise alignment of PM fibers is absolutely essential for high performance splices. Our dual, circular SAP design allows use of standard splice recipes from all major splice equipment manufacturers. When spliced correctly, TruePhase fibers exhibit low loss and high extinction ratios.

Typical Applications

- EDFAs
 - 980 Pump Laser Pigtails
 - 980 Pump Combiners or Pump Multiplexors
 - 980/1550 PM Pump/Signal WDM Couplers

Features and Benefits

- Short beat length of ≤2.8 mm
- High birefringence
- Tight geometrical tolerances
- Low attenuation of ≤3.0 dB/km
- Low sensitivity to bending-induced attenuation

Related Products & Capabilities

- See our full line of ClearLite TruePhase Photonic fibers for operation at different wavelengths in full-size 400 or 245 μm cladding constructions.
- Can be manufactured to a higher proof test level specification.
- ClearLite Micro Photonic fibers are available in 80 μm cladding sizes in a variety of wavelengths with no polarization.

Ask us about options available for these fibers:

- Cabling**
- Connectorization**
- Metalization**
- Additional Coatings**
- Coils**

To order items on this spec sheet, please contact our facility in:

- Avon, Connecticut
1-860-678-0371
1-888-438-9936 toll free
(USA and Canada only)
Fax 1-860-674-8818
- or by email inquiry to:
Info@SpecialtyPhotonics.com



OFS Specialty Photonics Division

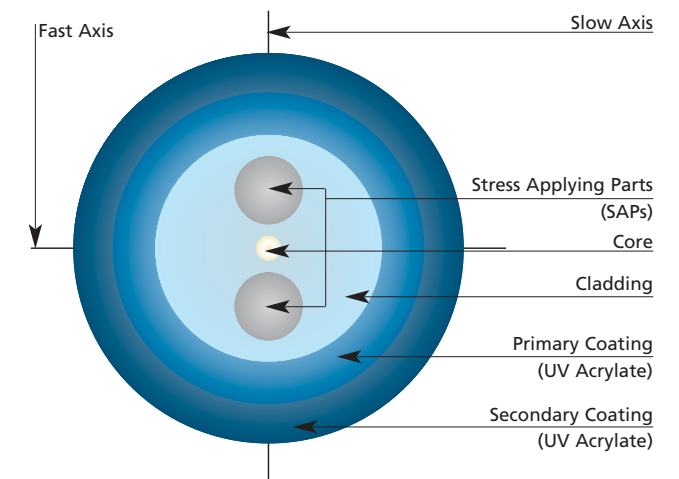
55 Darling Drive, Avon, CT 06001
25 Schoolhouse Road, Somerset, NJ 08873
Priorparken 680 DK-2605 Broendby, Denmark

www.SpecialtyPhotonics.com

Fiber Specifications

Optical Properties	CL TRUEPHASE 980 MICRO
Operating wavelength	980 nm
Cutoff wavelength	≤970 nm
Mode field diameter @ 980 nm	6.6 ± 1.0 μm
Attenuation @ 980 nm	≤3.0 dB/km
Beat length @ 980 nm	≤2.8 mm
Crosstalk @ 980 nm/100 m	≤-25 dB
Crosstalk (typical) @ 980 nm/100 m	≤-30 dB
Numerical aperture (nominal)	0.13
Dimensions/Geometric Properties	
Core diameter	4.8 μm
Clad diameter	80 ± 1.0 μm
Coating/buffer diameter	165 ± 10 μm
Coating type	Dual UV Acrylate
Clad non-circularity	≤2.0%
Core/clad offset	≥0.5 μm
Mechanical and Testing Data	
Operating temperature	-40 to +85°C
Proof test level	≥100 kpsi (.689 GPa)
Order by Part Number	F11317

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