

YOFC Single-mode Coupler Fibres



Ideal choice for pump laser pigtails, fibre gratings and high performance fused fibre couplers for optical communication.

Introduction

YOFC single-mode coupler fibres are particularly developed for manufacturing of fused optical fibre components. Fabricated with patented Plasma Chemical Vapor Deposition (PCVD) process, YOFC coupler fibre offers excellent uniformity, core-cladding concentricity, precise geometry and outstanding optical performance. Special optical waveguide structure and dual acrylate coating system ensures high mechanical strength and insensitivity to bending. This product is an ideal option for application in near-infrared communication devices and sensors.

Applications

Optical fibre couplers, splitters and combiners
Component fibre for optical fibre lasers, EDFAs and DWDM system
Pump laser pigtails
Gratings
Low-loss fused optical devices for C/L band application

Features

Outstanding uniformity and geometry control using patented Plasma Chemical Vapor Deposition (PCVD) process
Superior mechanical protection provided by dual acrylate coating system
Ultra-low bending loss
Low attenuation
Low insertion loss
Low splice loss
Excellent consistency and reliability

For more information about YOFC's Specialty Fibre technology visit our website at www.yofc.com

To obtain additional technical information, sample or to place an order for this product, please contact us at:

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YOFC Single-mode Coupler Fibres

Key Specifications

Product Category	C980	C1060	C1310
fibre Type	980/125-22/250	1060/125-14/250	1310/125-16/250
Operation Wavelength (nm)	>970	>970	>1300
Mode-field Diameter (µm)	4.0±0.3 @980nm 6.3±0.3 @1550nm	5.9±0.3 @980nm 6.2±0.3 @1060nm	6.0±0.5 @1310nm 7.1±0.5 @1550nm
Cutoff Wavelength (nm)	930±40	920±50	1200±50
Attenuation (dB/km)	≤2.5 @980nm ≤1.0 @1550nm	≤2.1@980nm ≤1.5@1060nm	≤1.0 @1310nm ≤1.0 @1550nm
Bendloss (@20mm O.D.)(dB/turn)	≤0.01 @980nm ≤0.01 @1550nm	≤0.01 @980nm ≤0.01 @1060nm	≤0.01 @1310nm ≤0.01 @1550nm
Numerical Aperture*	0.22	0.14	0.16
Core Diameter (µm)*	3.5	5.1	5.3
Cladding Outside Diameter (µm)**	125±0.5	125±0.5	125±0.5
Coating Outside Diameter (µm)	245±10	245±10	245±10
Core-to-Cladding Offset (µm)	≤0.3	≤0.3	≤0.3
Proof Test (kpsi)	100 or 200	100 or 200	100 or 200
Operating Temperature (°C)	-60~+85	-60~+85	-60~+85

*Here values provided are nominal values.

**Coupler fibres with cladding diameter of 80µm are also available.

Typical Splice

	C980		C1060	FullBand(G.652.D)	HI1060FLEX	HI1060	SMF-28e+
Wavelength(nm)	980	1550	980	1550	980	1550	1550
C980(dB)	0.04	0.04	0.09	0.08	0.04	0.04	0.08

	C980	C1060	FullBand(G.652.D)	HI1060FLEX	HI1060	SMF-28e+
Wavelength(nm)	980	1060	1550	980	1060	1550
C1060(dB)	0.09	0.04	0.08	0.09	0.05	0.08