

Single Mode Fused WDM



Description

Fused WDM is a compact and reliable wavelength division multiplexer / demultiplexer based on fused biconical taper (FBT) technology. It is designed to combine or separate two single-mode wavelengths over a wide spectral range from 450 nm to 2000 nm, covering visible, near-infrared, and infrared applications.

Features

- Low Insertion Loss
- Compact Structure
- High Power Handling
- High Stability and Reliability

Applications

- Fiber Laser
- Fiber Optic Amplifier
- Fiber Optic Sensing
- Underwater Communication

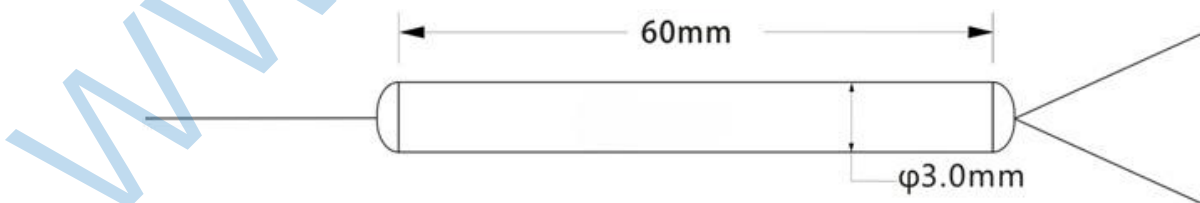
Specifications

Series 1: 450–850 nm

Parameter	Unit	Value					
Center Wavelength	nm	450/532	450/635	532/635	532/780	635/780	635/850
Operating Wavelength Range	nm	±5	±5	±5	±5	±5	±5
Isolation (Min.)	dB	13	13	15	15	20	20
Insertion Loss (Max.)	dB	1.5	1.5	1.5	1.0	0.8	0.8
Return Loss (Min.)	dB	55					
Polarization Dependent Loss	dB	≤0.2					
Max Optical Power (CW)	W	0.1	0.1	0.25	0.25	0.5	0.5
Fiber Type	-	460-HP			630-HP		
Tensile Load	N	5					
Package Dimensions	mm	Φ3 x L60 (Bare Fiber)/Φ3 x L70 (Loose Tube)					
Operating Temperature	°C	-40 to +85					
Storage Temperature	°C	-40 to +85					

Notes: Tested at 25 °C. Data exclude connectors; adding connectors increases insertion loss by 1.5 dB and reduces return loss by 5 dB.

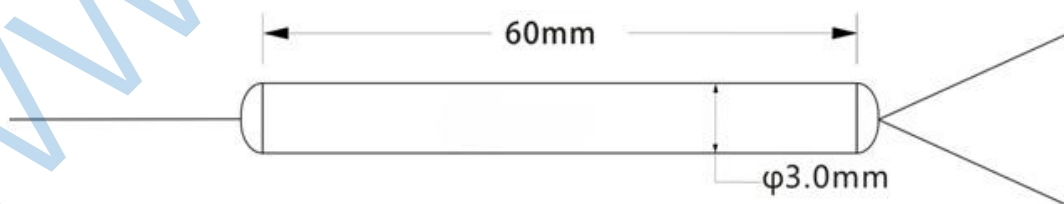
Product Dimensions



Series 2: 980–2000 nm

Parameter	Unit	Value							
Center Wavelength	nm	980/1030	980/1064	980/1310	980/1550	1064/1310	1064/1550	1310/1550	1570/2000
Operating Wavelength Range	nm	±3	±5	±10	±15	±15	±15	±15	±15
Isolation (Min.)	dB	12	15	20	20	20	20	17	18
Insertion Loss (Max.)	dB	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6
Return Loss (Min.)	dB	55							
Polarization Dependent Loss	dB	≤0.1							≤0.2
Max Optical Power (CW)	W	0.5/1/5/10							
Fiber Type	-	Hi1060						SMF-28e	
Tensile Load	N	5							
Package Dimensions	mm	Φ3 x L54 (Bare Fiber)/Φ3 x L60 (Loose Tube)							
Operating Temperature	°C	-40 to +85							
Storage Temperature	°C	-40 to +85							

Notes: Tested at 25 °C. Data exclude connectors; adding connectors increases insertion loss by 0.3 dB and reduces return loss by 5 dB.

Product Dimensions

Ordering Information

<input type="checkbox"/> nm	<input type="checkbox"/> W	<input type="checkbox"/>	<input type="checkbox"/> m	<input type="checkbox"/> μm	<input type="checkbox"/>
Center Wavelength	Max Optical Power (CW)	Fiber Type	Pigtail Length	Pigtail Diameter	Connector
450/532nm	0.1W	460-HP	0.5m	250μm Bare Fiber	None
450/635nm	0.25W	630-HP	1.0m	900μm Loose Tube	LC/UPC
532/635nm	0.5W	Hi1060	1.5m		LC/APC
532/780nm	1W	SMF-28e	2.0m		SC/UPC
635/780nm	5W				SC/APC
635/850nm	10W				FC/UPC
980/1030nm					FC/APC
980/1064nm					ST/UPC
980/1310nm					ST/APC
980/1550nm					
1064/1310nm					
1064/1550nm					
1310/1550nm					
1570/2000nm					