Polarization Maintaining In-Line Polarizer

Description

A Polarization Maintaining In-Line Polarizer is a fiber-optic polarizing component designed to transmit light along one defined polarization axis while strongly suppressing the orthogonal polarization. Integrated with polarization maintaining fiber, it provides stable linear polarization output with high extinction ratio and low insertion loss, making it suitable for fiber lasers, coherent optical systems, interferometers, fiber sensors, and polarization-sensitive test setups.

Features

High Extinction Ratio
High Stability and Reliability
Compact Size

Applications

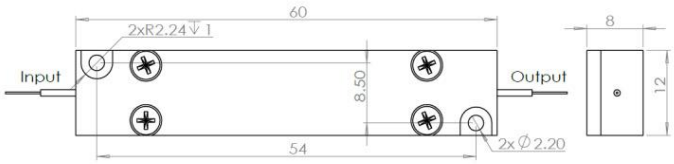
Fiber Laser
Fiber Sensor/Amplifier
Fiber Optic Communication

Specifications

Parameter	Unit	Value				
Center Wavelength	nm	780/808/830/850	980/1030/1064	1310	1480/1550	1950/2000/2050
Operating Wavelength Range	nm	±30	±30	±50	±50	±30
Insertion Loss (Max.)	dB	1.0	0.6	0.5	0.5	1.0
Return Loss (Min.)	dB	50				
Extinction Ratio (Min.)	dB	25	28	28	28	20
Max Optical Power (CW)	W	0.5/1/3/5/10				
Input Fiber Type	-	780-HP or PM780	Hi1060 or PM980	SMF-28e or PM1300	SMF-28e or PM1550	SM1950 or PM1950
Output Fiber Type	-	780-HP or PM780	Hi1060 or PM980	SMF-28e or PM1300	SMF-28e or PM1550	SM1950 or PM1950
Tensile Load (Max.)	N	5				
Package Dimensions	mm	Φ5.5 x L35 (≤5W) or 60 x 12 x 8 (≥5W)				
Operating Temperature	°C	-5 to +70				
Storage Temperature	°C	-40 to +85				

Notes: Tested at 25 °C. Data exclude connectors. Adding connectors will increase insertion loss by approximately 0.3 dB, reduce return loss by 5 dB, and decrease extinction ratio by 2 dB. The fiber slow axis is aligned to the key by default.

Product Dimensions



Ordering Information

□nm	□W	□	□	□m	□μm	□
Center Wavelength	**Max Optical Power (CW)**	**Input Fiber Type**	**Output Fiber Type**	**Pigtail Length**	**Pigtail Diameter**	**Connector**
780nm	0.5W	780-HP or PM780	780-HP or PM780	0.5m	250μm Bare Fiber	None
808nm	1W	Hi1060 or PM980	Hi1060 or PM980	1.0m	900μm Loose Tube	LC/UPC
830nm	3W	SMF-28e or PM1300	SMF-28e or PM1300	1.5m		LC/APC
850nm	5W	SMF-28e or PM1550	SMF-28e or PM1550	2.0m		SC/UPC
980nm	10W	SM1950 or PM1950	SM1950 or PM1950			SC/APC
1030nm						FC/UPC
1064nm						FC/APC
1310nm						ST/UPC
1480nm						ST/APC
1550nm						
1950nm						
2000nm						
2050nm						