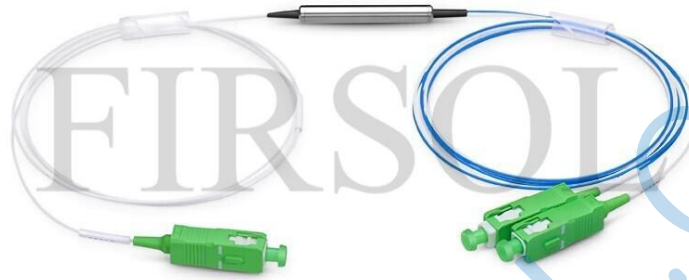


# Polarization Beam Splitter/Combiner



## Description

Polarization Beam Splitter/Combiner (PBS/PBC) is a passive optical device designed to split or combine orthogonal polarization states. It can separate randomly polarized light into two orthogonally polarized outputs, or combine two orthogonally polarized input signals into a single output fiber. PBS/PBC devices are widely used in fiber lasers, coherent communication systems, optical sensing, EDFA systems, and polarization-maintaining fiber applications.

## Features

- Low Insertion Loss
- High Extinction Ratio
- High Power Handling
- High Stability and Reliability

## Applications

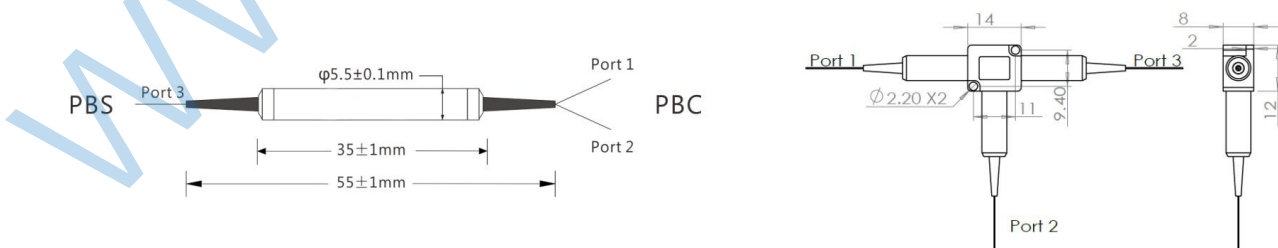
- Fiber Laser
- Fiber Optic Amplifier
- Fiber Optic Sensing
- Coherent Communication System

## Specifications

Parameter	Unit	Value					
Center Wavelength	nm	532	633/670	780/830/850	980/1030/1064	1310/1480/1550	1950/2000/2050
Operating Wavelength Range	nm	±10	±10	±20	±20	±40	±40
Insertion Loss (Max.)	dB	1.5	1.2	1.0	0.8	0.6	1.3
Return Loss (Min.)	dB	50					
Extinction Ratio (Min.)	dB	18	18	18	22	22	20
Directivity (Min.)	dB	50					
Max Optical Power (CW)	W	0.1		0.5/1/2/5/10			
Fiber Type	-	Port 1 and Port 2 PMF; Port 3 SMF or All PMF					
Tensile Load	N	5					
Package Dimensions	mm	14 x 12 x 8		Φ5.5 x L35 (<5W)/14 x 12 x 8 (>5W)			
Operating Temperature	°C	-5 to +70					
Storage Temperature	°C	-40 to +85					

**Notes:** Tested at 25 °C. Specifications exclude connectors. Adding connectors may cause wavelength-dependent variation in insertion loss; please contact us for detailed data. Return loss decreases by approximately 5 dB, and extinction ratio by 2 dB. The fiber slow axis is aligned to the key by default.

## Product Dimensions



## Ordering Information

Device Type	Center Wavelength	Max Optical Power (CW)	Fiber Type (Port 1 & 2)	Fiber Type (Port 3)	Pigtail Length	Pigtail Diameter	Connector
PBS	532nm	0.1W	PM460	460-HP	0.5m	250µm Bare Fiber	None
PBC	633nm	0.5W	PM630	PM460, Slow Axis Aligned to Port 1 Slow Axis	1.0m	900µm Loose Tube	LC/UPC
	670nm	1W	PM780	PM460, Slow Axis Aligned 45° to Port 1 Slow Axis	1.5m		LC/APC
	780nm	2W	PM980	630-HP	2.0m		SC/UPC
	830nm	5W	PM1300	PM630, Slow Axis Aligned to Port 1 Slow Axis			SC/APC
	850nm	10W	PM1550	PM630, Slow Axis Aligned 45° to Port 1 Slow Axis			FC/UPC
	980nm		PM1950	780-HP			FC/APC
	1030nm			PM780, Slow Axis Aligned to Port 1 Slow Axis			ST/UPC
	1064nm			PM780, Slow Axis Aligned 45° to Port 1 Slow Axis			ST/APC
	1310nm			Hi1060			
	1480nm			PM980, Slow Axis Aligned to Port 1 Slow Axis			
	1550nm			PM980, Slow Axis Aligned 45° to Port 1 Slow Axis			
	1950nm			SMF-28e			
	2000nm			PM1300, Slow Axis Aligned to Port 1 Slow Axis			
	2050nm			PM1300, Slow Axis Aligned 45° to Port 1 Slow Axis			
				SMF-28e			
				PM1550, Slow Axis Aligned to Port 1 Slow Axis			
				PM1550, Slow Axis Aligned 45° to Port 1 Slow Axis			
				SM1950			
				PM1950, Slow Axis Aligned to Port 1 Slow Axis			
				PM1950, Slow Axis Aligned 45° to Port 1 Slow Axis			