



Polarization Beam Combiner/Splitter (PBC/PBS Series)

Rev 11

Description

The Polarization Beam Combiner/Splitter is a compact high performance lightwave component that combines two orthogonal polarization signals into one output fiber. The most common application is to combine two pump lasers into one single fiber to double the pump power in EDFA or Raman Amplifier. This Beam Combiner/Splitter can also be used as a beam splitter.

Key Features

- Low Insertion Loss

Applications

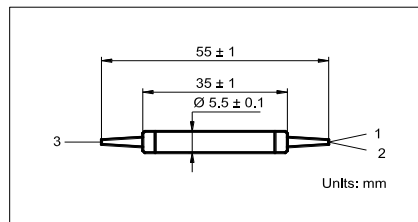
- EDFA
- Raman Amplifier

Specifications

Parameter	Unit	Value	
Grade	-	Grade P	Grade A
Center Wavelength (λ_c)	nm	1310, 1480 or 1550	
Operating Wavelength Range	nm	$\lambda_c \pm 40$	
Typ. Insertion Loss	dB	0.4	0.5
Max. Insertion Loss	dB	0.6	0.7
Min. Extinction Ratio (for Splitter Only), 23 °C	dB	22	20
Min. Return Loss	dB	50	
Min. Directivity	dB	50	
Max. Optical Power (Continuous Wave)	mW	500	
Fiber Type	-	PM Panda Fiber for Ports 1 & 2	
	-	SMF-28 or PM Panda Fiber for Port 3	
Max. Tensile Load	N	5	
Operating Temperature	°C	- 5 to + 70	
Storage Temperature	°C	- 40 to + 85	

¹IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

Package Dimensions



Ordering Information

PBC-①①-②-③-④-⑤-⑥

PBS-①①-②-③-④-⑤-⑥

①①: Wavelength

31 - 1310 nm

48 - 1480 nm

55 - 1550 nm

SS - Specify

②: Grade

P - Premium

A - A Grade

③: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC N - None

4 - SC/APC S - Specify

④: Fiber Jacket

B - 250 μ m Bare Fiber

L - 900 μ m Loose Tube

S - Specify

⑤: Fiber Type for Port 3

1 - SMF-28 Fiber

2 - Slow Axis Aligned 45° to Port 1

3 - Slow Axis Aligned to Port 1

S - Specify

⑥: Fiber Length

Q - 0.75 m

S - Specify