

Full-Fiber Pigtailed Polarization Beam Splitter/Combiner (PBS/PBC Series)



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 the light of two pump lasers into a single fiber to double the pump power to an Erbium-Doped Fiber Amplifier (EDFA) or a Raman Amplifier. The typical configuration uses two PM fibers for the input and the SM fiber for the output. The device can also be used as a beam splitter with SM/PM input fiber, depending on applications.

Partially multimode(MM) fiber pigtailed versions available for some special applications; Customized hybrid tapped & isolated PBS/PBC modules may be designed per requirements.

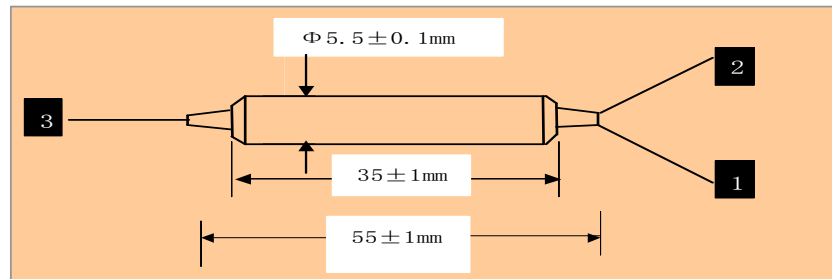
Key Specifications

Parameter	Unit	Grade P	Grade A
Center Wavelength	nm	1310, 1480 or 1550	
Operating Wavelength Range	nm	± 40	
Typ. Insertion loss	dB	0.3	0.5
Max. Insertion loss	dB	0.6	0.8
Min. Extinction Ratio (for splitter only)	dB	22	20
Min.Return Loss	dB		50
Min.Directivity	dB		50
Max. Optical Power(CW)	W	1000(for high power); 300mW typ.	
Fiber Type		Port 1 & 2: PM(Panda) Fiber; Port 3: SMF-28 or PM(Panda) Fiber	
Max. Tensile Load	N	5	
Operating Temperature	°C	-5 to + 70	
Storage Temperature	°C	-40 to +85	

Above specifications are for device without connector.

* For devices with input & output connectors, IL will be total 0.2 ~ 0.3dB higher, while RL will be 5dB lower, and ER with 2dB lower.

Package Dimensions



Ordering Information

PBS/C-①①-②-③③③③-④④④④-⑤⑤⑤⑤-⑥

For definitions of ③ - ⑤, please specify each per options of a,b,c,and d in sequence)

①①: Wavelength

31-1310nm
48-1480nm
55-1550nm
SS-Specify

③: Port 1 Definition

④: Port 2 Definition
⑤: Port 3 Definition

a: Connector Type

1 - FC/UPC
2 - FC/APC
3 - SC/UPC
4 - SC/APC
N - None
S - Specify

b: Fiber Type

1 - SMF-28
2 - PM(Panda)
3 - 50/125um MMF
4 - 62.5/125um MMF
S - Specify

c: Fiber Dimension

1 - 250um bare fiber
2 - 400um tube
3 - 900um tube
S - Specify

d: Fiber Length

1 - 1.0 meter, standard
S - Specify

⑥: Power Version

Q - Low power 300mW or less
H - 500 ~1000mW
S - Specify

Remark: If unspecified by users, PM connector keys are all aligned to the slow axis of PM fiber pigtail.