



Polarization Beam Combiner/Splitter (PBC/PBS 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.

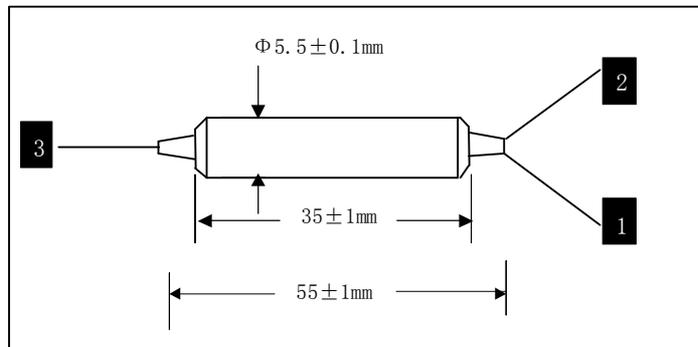
Specifications

Parameter	Unit	Grade P	Grade A
Center Wavelength	nm	1310,1480 ro 1550	
Operating Wavelength Range	nm	± 40	
Typ. Insertion loss	dB	0.4	0.5
Max. Insertion loss	dB	0.6	0.7
Min. Extinction Ratio (for splitter only)	dB	22	20
Min.Return Loss	dB	50	
Min.Directivity	dB	50	
Max. Optical Power	mW	500	
Fiber Type		PM Panda Fiber on Port 1 and 2,SMF-28 or PM Panda Fiber on Port 3	
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 connectors, IL will be 0.3dB higher, RL will be 5dB lower, and ER will be 2dB lower.

Package Dimensions



Ordering Information

PBC-①①-②-③-④-⑤-⑥

PBS-①①-②-③-④-⑤-⑥

①①: Wavelength

31-1310nm

48-1480nm

55-1550nm

SS-Specify

②: Grade

P - Premium

A - A Grade

③: Connector Type

1 - FC/UPC

2 - FC/APC

3 - SC/UPC

4 - SC/APC

N - None

S - Specify

④: Fiber Type

B- 250um Panda Fiber

D- 400um Panda Fiber

L- 900um loose tube Panda Fiber

S - Specify

⑥: Fiber Length

Q - 0.75m

S - Specify

⑤: Fiber Type on Port 3

1 - SMF-28 (Standard)

2 - Slow axis align 45° to port 1

3 - Slow axis align to port 1

S - Specify

Remark: The PM fiber and the connector key are aligned to the slow axis

If port 3 is SMF-28 fiber, 250um bare fiber will be used when 250um or 400um Panda Fiber is selected for port 1 and 2