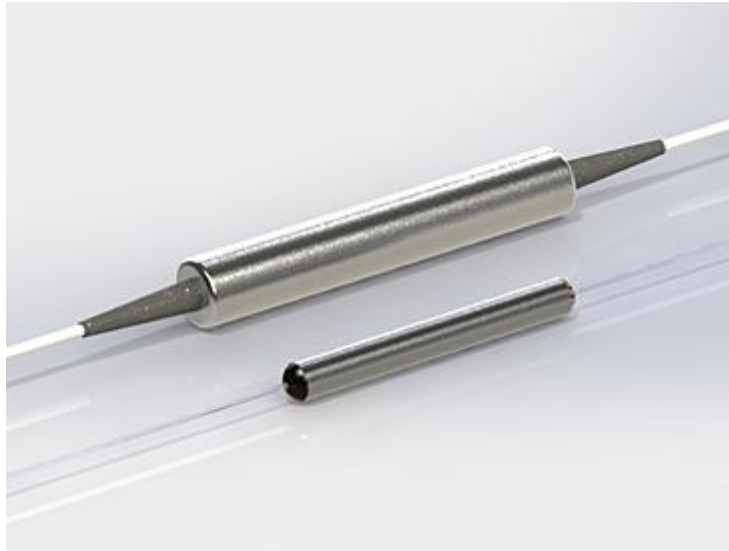


1310nm Polarization Beam Combiner



● Product Description

Polarization beam splitters (PBS/PBC) are used to couple two orthogonal polarized light beams into one optical fiber or to couple a single output containing orthogonal linear polarized light beams into two optical fiber outputs. They can also be used in reverse to couple two orthogonal polarized light beams input from polarization-maintaining fiber branches into a single-mode output fiber. They can be used to combine the power of pump lasers and increase the power of fiber lasers. An important use of these two devices is to increase the capacity of optical systems in polarization multiplexing and demultiplexing technologies.

● Part Number

PBC-P-13-1-2-2-2-1

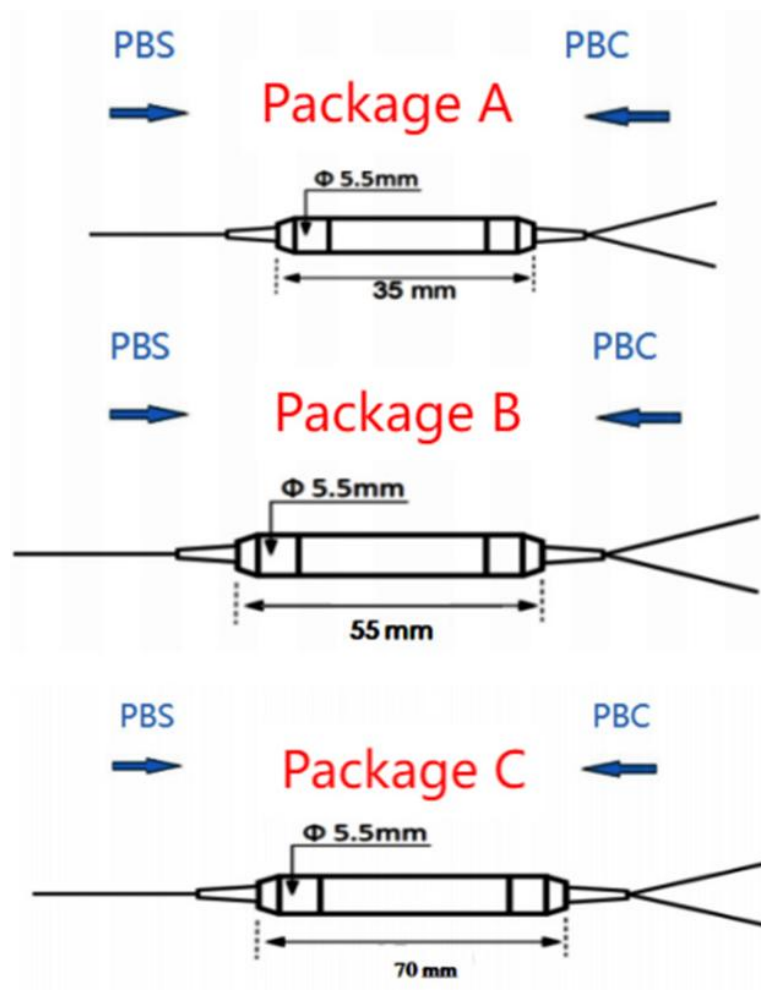
● Product features

Compact size 、 Low insertion loss performance 、 High handling power performance、 High reliability and stability

● Application area

Fiber laser、 Fiber sensor、 Communication system field、 Applied in test equipment、 Used in polarization multiplexing and demultiplexing、 High power EDFA

● Dimensional Drawing



Parameter

parameter	Name		Unit	Specification indicator	
Optical performance	level		/	P	A
	Central wavelength		nm	1310,1480or1550	
	Operating width		nm	±40	
	Typical insertion loss at room temperature		dB	0.4	0.5
	Maximum insertion loss at room temperature		dB	0.6	0.7
	Typical minimum extinction ratio at room temperature		dB	22	20
	Maximum polarization-dependent loss at room temperature		dB	0.20	
	Minimum polarization crosstalk loss (Port1 to Port3)		dB	50	
	Minimum directivity		dB	50	
	Minimum return loss		dB	50	
	Maximum carrying power		mw	500	
	Maximum tensile strength (CW)		N	5	
Mechanical structure	Package size		mm	φ 5.5×35(customizable)	
	Pigtail length		m	≥1(customizable)	
	Pigtail type	Port1 & Port 2	/	PM Fiber(SM13/14/15-PS-U25A)	
		Port 3	/	Single-mode (SM)or Polarization-maintaining (PM Panda Fiber)(customizable)	
Environment indicators	Operating temperature		°C	-5 ~ +70	
	Storage temperature		°C	-40 ~ +85	

Note:

- ① For products with connectors, the insertion loss is 0.30dB more, the return loss is 5dB less, and the extinction ratio is 2dB lower.
- ② The default setting for polarization-maintaining fiber is slow axis to axis.

Ordering Information

XXX-X-XX-X-X-X-X-XX

Product model: XXX	PBC=Polarization Beam Combiner; PBS=Polarization Beam Splitter
Grade: X	P=P-grade; A=A-grade
Wavelength: XX	13=1310nm; 14=1480nm; 15=1550nm; XX=Customizable
Pigtail model (Port 1 and 2): X	1=Polarization-maintaining fiber; 2=Single-mode fiber; 3=Customizable
Pigtail model (Port 3): X	1=Single-mode fiber; 2=Slow axis alignment for port 1; 3=45 degree alignment for port 1
Pigtail type: X	1=250μm bare fiber; 2=900μm loose sleeve; 3=2mm Kevlar; 4=3mm Kevlar; 5=Customizable
Pigtail length: X	1=0.5m; 2=1m; 3=Customizable
Package size: X	1=Package A; 2=Package B; 3=Package C; 4=Customizable
Connector type: XX	1=None; 2=FC/PC; 3=FC/APC; 4=SC/FC; 5=Customizable