

# Polarization Beam Splitter

## (1310nm,1550nm,1064nm,980nm)

### Features

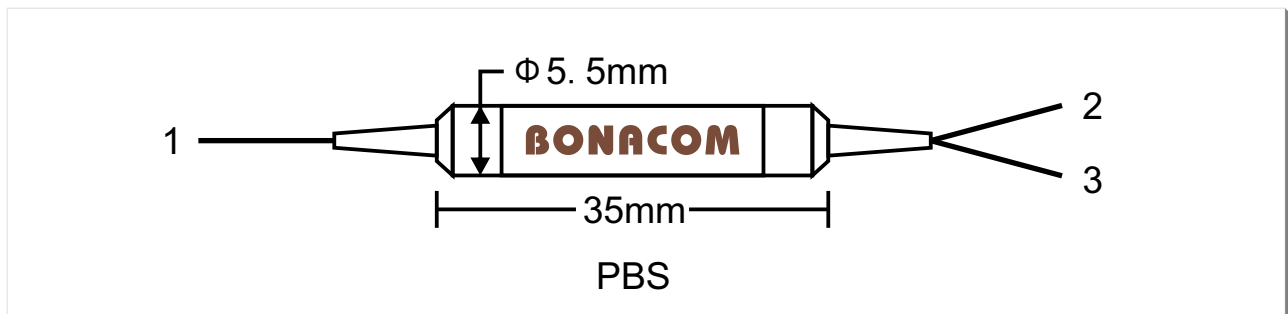
- Low Insertion Loss
- High Return Loss
- High Extinction Ratio
- High Reliability
- High Stability

### Applications

- Fiber Optical Current Transducer
- Fiber Sensor
- Optical Fiber Gyro
- Coherent Telecommunication Systems



### ◆ Package Dimensions



**Routing path is from port 3 to 1,2, Here are three options of polarized state from Port 3 to Port 1 & 2:**

**Option 1: SM to PM,**

Port 3, Circularly polarized light in,  
 Port 1: 50%,Linear polarized light out, through slow axis, Port 2: 50%,Linear polarized light out, through slow axis

**Option 2: PM to PM, port 3 is slow axis 0° aligned to port 1**

1.Port 3, Linearly polarized light in, through slow axis,  
 Port 1: 100%,Linear polarized light out, through slow axis, Port 2: 0%  
 2.Port 3,Linearly polarized light in, through fast axis,  
 Port 1: 0%, Port 2: 100%,Linear polarized light out, through slow axis

**Option 3: PM to PM,port 3 is slow axis 45° aligned to port 1**

1.Port 3, Linearly polarized light in, through slow axis,  
 Port 1: 50%,Linear polarized light out, through slow axis, Port 2: 50%,Linear polarized light out, through slow axis  
 2.Port 3, Linearly polarized light in, through fast axis,  
 Port 1: 50%,Linear polarized light out, through slow axis, Port 2: 50%,Linear polarized light out, through slow axis

## ◆ Specifications

Parameter	Unit	Value			
Grade	-	P	A	P	A
Center Wavelength	nm	1310,1550		1064,980	
Operating Wavelength Range	nm	±40		±20	
Typ. Insertion Loss at 23°C	dB	0.4	0.5	0.6	0.7
Max. Insertion Loss at 23°C	dB	0.6	0.7	0.8	0.9
Min. Extinction Ratio at 23°C	dB	22	20	22	20
Min. Directivity	dB	50			
Min. Return Loss	dB	50			
Max. Optical Power(CW)	mW	300			
Max. Tensile Load	N	5			
Fiber Type	Port 1 & 2	-	PM Panda fiber		
	Port 3	-	SMF-28E, Hi1060 or PM Panda fiber		
Operating temperature	°C	-5~+70			
Storage temperature	°C	-40~+85			

For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.  
The default connector key is aligned to slow axis.

## ◆ Ordering Information

PBS-1111-23-444-555-678-999

2	-Grade:	P=Perfect grade, A=A grade
3	-Option for Port 3 to 1,2:	1=Option 1, 2=Option 2, 3=Option 3
444	-Fiber Type for Port 3:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
555	-Fiber Type for Port 1,2:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
6	-Package Dimension:	0=φ5.5x35mm, 1=φ5.5x50mm, S=Specified
7	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
8	-Fiber Length:	0=0.8m, 1=1m
999	-Connector for Port 1,2,3:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None