

# Isolator Polarization Beam Splitter

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

### Features

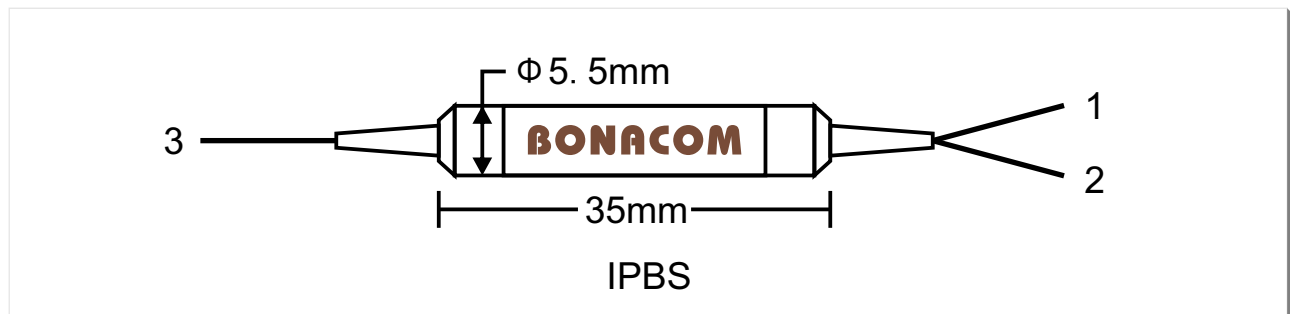
Low Insertion Loss  
 High Return Loss  
 High Extinction Ratio  
 High Reliability  
 High Stability

### Applications

EDFA & Raman Amplifier  
 Fiber Sensor  
 Coherent Telecommunication Systems  
 Polarization Mode Dispersion Compensator



### ◆ 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	
Stage	-	Dual	Single
Center Wavelength	nm	1310,1550	1310,1550 1064
Operating Wavelength Range	nm	±20	±20 ±5
Typ. Insertion Loss at 23°C	dB	0.55	0.45 1.8
Max. Insertion Loss at 23°C	dB	0.80	0.70 2.1
Typ. Isolation	dB	51	35 35
Min. Isolation	dB	42	20 25
Min. Extinction Ratio at 23°C	dB	25	20 20
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	-	PM Panda fiber or SMF-28E or Hi1060
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

IPBS-1111-234-555-666-789-AAA

1111	-Center Wavelength:	1550=1550nm,1310=1310nm,.....,0850=850nm
2	-Grade:	P=Perfect grade, A=A grade
3	-Core Type:	S=Single-core, D=Dual-core
4	-Option for Port 3 to 1,2:	1=Option 1, 2=Option 2, 3=Option 3
555	-Fiber Type for Port 3:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
666	-Fiber Type for Port 1,2:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
7	-Package Dimension:	0=φ5.5x35mm, 1=φ5.5x50mm, S=Specified
8	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
9	-Fiber Length:	0=0.8m,1=1m
AAA	-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