

1550nm Polarization Beam Splitter

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

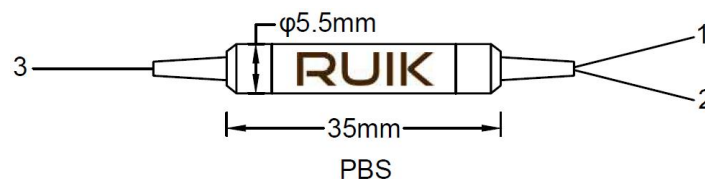
Specifications

Parameters		Unit	Values	
Grade		-	P	A
Center Wavelength		nm	1550	
Operating Wavelength Range		nm	±40	
Typ. Insertion Loss at 23℃		dB	0.4	0.5
Max. Insertion Loss at 23℃		dB	0.6	0.7
Min. Extinction Ratio at 23℃		dB	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		℃	-5~+70	
Storage temperature		℃	-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.

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

1550nm Polarization Beam Splitter

Ordering Information

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

1111	-Center Wavelength:	1550=1550nm,1310=1310nm,.....,0850=850nm
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