

1550nm Polarization Beam Combiner

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

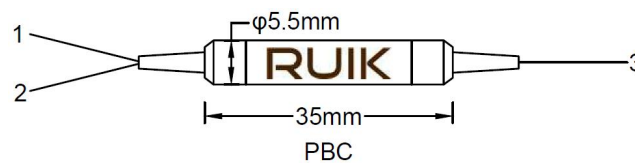
Specifications

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.

More Details



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

Option 1, PM to SM,

Port 1: 50%,Linear polarized light in, through slow axis, Port 2: 50%,Linear polarized light in, through slow axis
Port 3, 100%, Circularly polarized light Out,

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

Port 1, 2, only work through slow axis, blocked the fast,
The slow axis of port 1 is aligned to the slow axis of port 3,
The slow axis of port 2 is aligned to the fast axis of port 3,

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

Port 1, 2, only work through slow axis, blocked the fast,
Port 1 or 2, 100%,Linear polarized light in, through slow axis,
Port 3, 25% linear polarized light out, through slow axis, and 25% by the fast,

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Ordering Information

PBC-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