

## 1550nm Isolator & Polarization Beam Combiner Hybrid

### 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

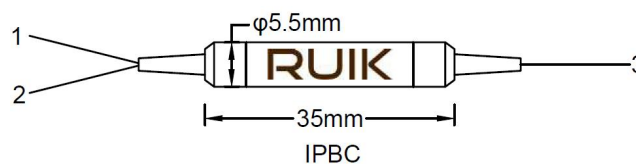
### Specifications

Parameters	Unit	Values	
Stage	-	Dual	Single
Center Wavelength	nm	1550	
Operating Wavelength Range	nm	±20	
Typ. Insertion Loss at 23℃	dB	0.55	0.45
Max. Insertion Loss at 23℃	dB	0.80	0.70
Typ. Reversed Isolation at 23℃(Port 3 to Port1 or 2)	dB	51	35
Min. Isolation at 23℃(Port 3 to Port1 or 2)	dB	42	20
Min. Extinction Ratio at 23℃	dB	25	20
Directivity	dB	50	
Min. Return Loss	dB	50	
Max. Optical Power(CW)	mW	300	
Max. Tensile Load	N	5	
Fiber Type	Port1 & 2	-	PM Panda fiber
	Port3	-	PM Panda fiber or SMF-28E or Hi1060
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

IPBC-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