



Isolator Polarization Beam Combiner/Splitter (IPBC/IPBS Series)

Rev 11

Description

The Isolator Polarization Beam Combiner/Splitter is a compact device that provides both polarization beam combining and optical isolation in one integrated component. The most common application is to combine the light of two pump lasers into one single fiber to double the pump power in EDFA or Raman Amplifier. The Isolator Polarization Beam Combiner/Splitter has extremely low insertion loss, and it can improve the amplifier performance.

Key Features

- Low Insertion Loss
- Compact Size

Applications

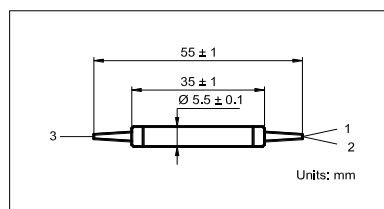
- EDFA
- Raman Amplifier

Specifications

Parameter	Unit	Value	
Stage	-	Single Stage	Dual Stage
Center Wavelength (λ_c)	nm	2000	
Operating Wavelength Range	nm	$\lambda_c \pm 20$	
Typ. Insertion Loss	dB	0.6	0.7
Max. Insertion Loss	dB	1.2	1.3
Min. Isolation, 23°C	dB	20	42
Min. Extinction Ratio, 23°C (for splitter only)	dB	20	20
Min. Return Loss	dB	50	
Directivity	dB	50	
Max. Optical Power (Continuous Wave)	mW	500	
Fiber Type	-	PM 1550 Panda Fiber for Ports 1 & 2, SMF-28 or PM 1550 Panda Fiber for Port 3	
Max. Tensile Load	N	5	
Operating Temperature	°C	- 5 to + 70	
Storage Temperature	°C	- 40 to + 85	

¹IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

Package Dimensions



Ordering Information

IPBC-①-②②-③-④-⑤-⑥**IPBS-①-②②②-③-④-⑤-⑥**

①: Stage

②②②②: Wavelength

③: Connector Type

④: Fiber Jacket

1 - Single Stage

2000 - 2000 nm

1 - FC/UPC

4 - SC/APC

B - 250 μ m Bare Fiber

2 - Dual Stage

SSSS - Specify

2 - FC/APC

N - None

L - 900 μ m Loose Tube

3 - SC/UPC

S - Specify

S - Specify

⑤: Fiber Type for Port 3

1 - SMF-28 Fiber

2 - Slow Axis Aligned 45° to Port 1

3 - Slow Axis Aligned to Port 1

S - Specify

⑥: Fiber Length

Q - 0.75 m

S - Specify