

PRODUCT INFORMATION SHEET

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

The Isolator Polarization Beam Combiner/Splitter is a compact devices which 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 a single fiber to double the pump power to an Erbium-Doped Fiber Amplifier (EDFA) or a Raman Amplifier. Due to IPBC/IPBS has extremely low insertion loss it can improve the amplifier performance.

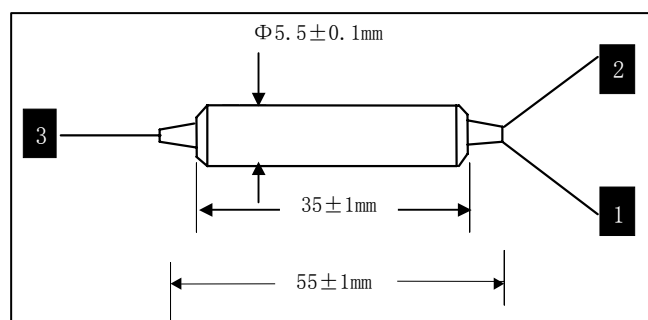
➤ Specifications

Parameter	Unit	Single stage	Dual stage
Center Wavelength	nm	1310, 1480 or 1550	
Operating Wavelength Range	nm	± 20	
Typ. Insertion loss	dB	0.45	0.55
Ma. Insertion loss	dB	0.7	0.8
Typ. Isolation	dB	35	51
Min. Isolation	dB	20	42
*Min. Extinction Ratio (for splitter only)	dB	20	20
Min. Return Loss	dB	50	
Min. Directivity	dB	50	
Max. Optical Power	mW	500	
Fiber Type		PM Panda Fiber on Port 1 and 2, SMF-28 or PM Panda Fiber on Port 3	
Max. Tensile Load	N	5	
Operating Temperature	°C	-5 to + 70	
Storage Temperature	°C	-40 to +85	

*Above specifications are for device without connector.

*For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower, and ER will be 2dB lower.

➤ Package Dimensions



➤ Ordering Information

IPBC-①-②-③-④-⑤-⑥

IPBS-①-②-③-④-⑤-⑥

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|----------------|--------------|------------------|---------------------------------|-------------------------------------|
| ① Stage | ② Wavelength | ③ Connector Type | ④ Fiber Type | ⑤ Fiber Type for Port 3 |
| 1-Single Stage | 31 - 1310nm | N - None | B- 250um Panda Fiber | 1 - SMF-28 (Standard) |
| 2-Dual Stage | 48 - 1480nm | S - Specify | D- 400um Panda Fiber | 2 - Slow axis align 45° to output 1 |
| | 55 - 1550nm | | L- 900um loose tube Panda Fiber | 3 - Slow axis align to output 1 |
| | SS - Specify | | S - Specify | S - Specify |
| ⑥ Fiber Length | | | | |
| Q - 0.75 m | | | | |
| S - Specify | | | | |