



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 performan



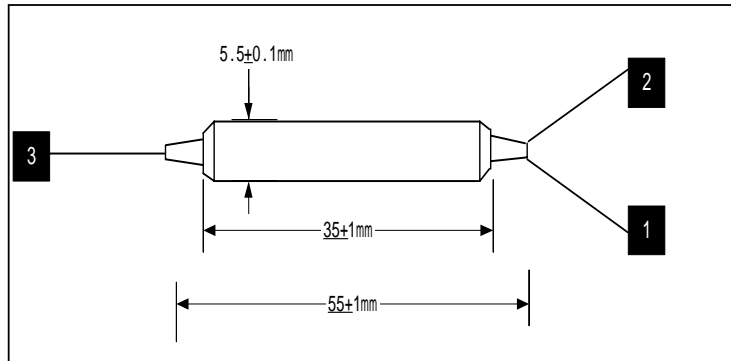
Specifications

| Parameter | Unit | Single stage | Dual stage |
|--|------|---------------------------------------|------------|
| Center Wavelength | nm | 1310, 1480 or 1550 | |
| Operating Wavelength Range | nm | ± 20 | |
| Typical Insertion loss | dB | 0.45 | 0.55 |
| Maximum Insertion loss | dB | 0.7 | 0.8 |
| Typical Isolation | dB | 35 | 51 |
| Mini Isolation | dB | 20 | 42 |
| *Min. Extinction Ratio (for splitter only) | dB | 20 | 18 |
| Min. Return loss | dB | 50 | |
| Max. Optical Power | mW | 500 | |
| Fiber | | PM on port 1 and 2, SM or PM on port3 | |
| Max. Tensile Load | N | 5 | |
| Operating Temperature | | -5 to + 70 | |
| Storage Temperature | | -40 to +85 | |

Above specification are for device without connector.

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

Package Dimensions



Ordering Information

IPBC- - - - - -

IPBS- - - - - -

| | | | |
|----------------|------------------|-------------------------------------|----------------|
| : Stage | : Connector Type | : Fiber Type | : Fiber Length |
| 1-Single stage | 1- FC/UPC | B- 250 um panda fiber | Q - 0.75m |
| 2-Dual stage | 2 -FC/APC | D- 400um panda fiber | S - Specify |
| | 3 - SC/UPC | L- 900um loose tube panda fiber | |
| : Wavelength | 4 - SC/APC | S - Specify | |
| 31 - 1310nm | S - Specify | | |
| 48 - 1480nm | N - None | :Fiber Type for port 3 | |
| 55 - 1550nm | | 1 - SMF-28 (Standard) | |
| SS - Specify | | 2 - Slow axis align 450 to output 1 | |
| | | 3 - Slow axis align to output 1 | |
| | | S - Specify | |

Remark: The PM fiber and the connector key are aligned to the slow axis

If port 3 is SMF-28 fiber, 250um bare fiber will be used when 250um or 400um panda fiber is selected for port 1 and 2