

Polarization Beam Splitter/Combiner

The Isolator Polarization Beam Combiner/Splitter is a compact high performance lightwave component that combines orthogonal polarization signals into one output fiber. 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 device can be also used as a beam splitter.

Features

- Compact High Performance
- High Extinction Ratio
- Low Insertion Loss
- High Directivity

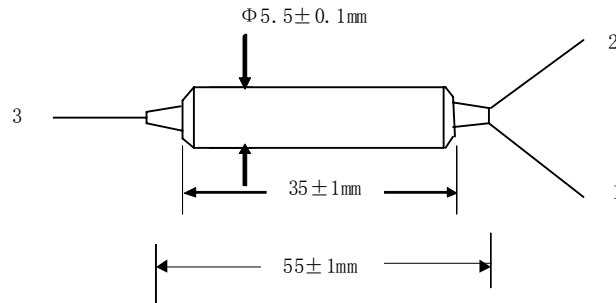
Applications

- Polarization Mode Dispersion Compensator
- EDFA & Raman Amplifier
- Coherent Telecommunication Systems
- Fiber Optic Sensor

Specifications

| Parameters | Unit | Grade P | Grade A |
|--|------|------------------------------|---------|
| Center Wavelength (λ_c) | nm | 1310, 1480 or 1550nm | |
| Operating Wavelength Range | nm | ± 40 | |
| Typ. Insertion Loss | dB | 0.35 | 0.45 |
| Max. Insertion Loss | dB | 0.6 | 0.7 |
| Min. Return Loss | dB | 50 | |
| Min. Extinction Ratio(for splitter only) | dB | 22 | 20 |
| Min. Directivity | dB | 50 | |
| Max. Optical Power (CW) | mW | 500 | |
| Max. Tensile Load | N | 5 | |
| Fiber Type | | PM Panda Fiber on Port 1 & 2 | |
| 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. | | | |
| * The PM fiber and the connector key are aligned to the slow axis. | | | |

Package Dimensions



Ordering Information

PBC-①①-②-③-④④④-⑤⑤⑤-⑥-⑦

PBS-①①-②-③-④④④-⑤⑤⑤-⑥-⑦

| | | | |
|----------------|---------------------------------|---|---|
| ①①: Wavelength | ③: Port | ⑤: Fiber Jacket on Port 1/2/3 | ⑥: Fiber Type on Port 3 |
| 31 - 1310nm | 1 - 1*2 | B - 250 μm Panda fiber | 1 - SMF-28e Fiber |
| 48 - 1480nm | | D - 400um Bare Fiber (only for 2 - PM Panda Fiber, Slow PM Fiber) | Axis align 45° to Port 1 |
| 55 - 1550nm | ④: Connector Type on Port 1/2/3 | L - 900 μm loose tube | 3 - PM Panda Fiber, Slow Axis align to Port 1 |
| SS - Specify | 1 - FC/UPC | S - Specify | S - Specify |
| | 2 - FC/APC | | |
| ②: Grade | 3 - SC/UPC | | |
| P - Premium | 4 - SC/APC | | |
| A - A grade | N - None | | ⑦: Fiber Length |
| | S - Specify | | 0.8 - 0.8m |
| | | | S - Specify |