

PRODUCT INFORMATION SHEET

Polarization Beam Combiner/Splitter (PBC/PBS Series)

The Polarization Beam Combiner/Splitter is a compact high performance lightwave component that combines two orthogonal polarization signals into one output fiber. 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. The typical configuration uses two PM fibers for the input and the SM fiber for the output. The device can also be used as a beam splitter.

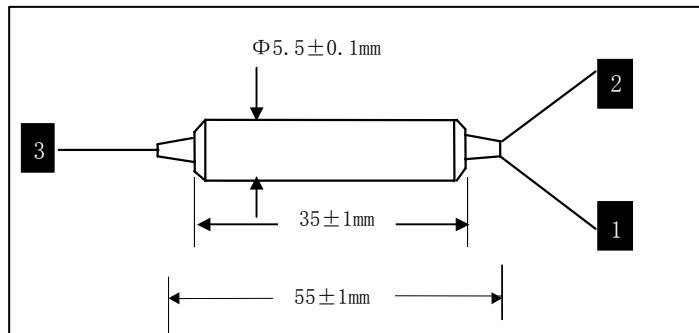
➤ Specifications

| Parameter | Unit | Grade P | Grade A |
|---|------|---|---------|
| Center Wavelength | nm | 1310,1480 ro 1550 | |
| Operating Wavelength Range | nm | ± 40 | |
| Typ. Insertion loss | dB | 0.4 | 0.5 |
| Max. Insertion loss | dB | 0.6 | 0.7 |
| Min. Extinction Ratio (for splitter only) | dB | 22 | 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

PBC-①-②-③-④-⑤-⑥
PBS-①-②-③-④-⑤-⑥

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