

Polarization Beam Combiner/Splitter

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.

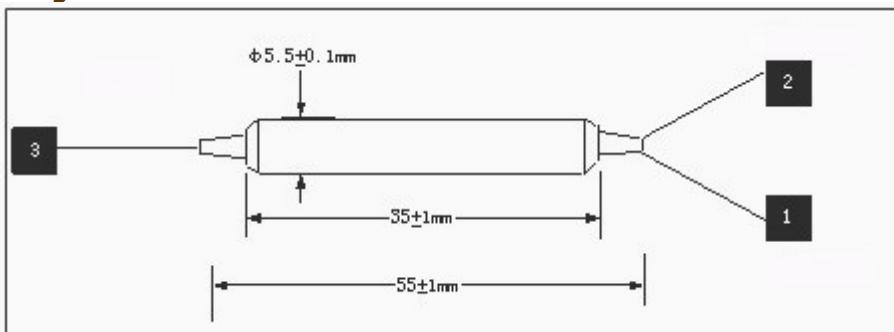
Specifications

| Parameter | Value | |
|---|--|--|
| Center Wavelength | 1310, 1480 or 1550 nm | 980nm |
| Operating Wavelength Range | $\pm 40\text{nm}$ | $\pm 10\text{nm}$ |
| Typical Insertion loss | 0.4dB | 0.8dB |
| Maximum Insertion loss | 0.6dB | 1.0dB |
| Min. Extinction Ratio (for splitter only) | 20dB | |
| Return loss | 50dB | |
| Max. Optical Power | 500mW | |
| Fiber | PM on port 1 and 2, SM or PM on port3 | 980nm PM on port 1 & 2, HI 1060 or 980nm on port3 |
| Max. Tensile Load | 5N | |
| Operating Temperature | -5 to + 70°C | |
| Storage Temperature | -40 to +85°C | |

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.

Imagine



Ordering Information

| PBC PBS | Wavelength | Fiber Type at Port 1&2 | Fiber Type at Port 3 | Fiber Length | Connector |
|------------|---|---|---|------------------|---|
| | 13=1310nm 14=1480nm 15=1550nm 98=980nm | B- 250 um panda fiber D- 400um panda fiber L- 900um loose tube panda fiber | 1 - SMF-28 (Standard)(HI1060 for 980 PBC/PBS) 2 - Slow axis align 45° to port 1 3 - Slow axis align to port 1 S - Specify | 1=1.0m 2=2.0m | NE=None FA=FC/APC FC=FC/PC SA=SC/APC SC=SC/PC ST=ST/PC LA=LC/APC LC=LC/PC XX=others |