

## 1040nm Polarization Beam Combiner/Splitter

1040nm Polarization Beam Combiner/Splitter is a fiber passive component which can combine the two orthogonal polarization light into one output fiber or split the orthogonal polarization light to two output fiber, it's widely used in Fiber Amplifier System and Fiber Optic Diffraction field, the high power type is available upon request.

### Application:

Fiber Optic Amplifier  
Fiber Optic Sensor  
Laser System  
Fiber Optic Diffraction

### Features:

High Extinction Ratio  
Low Insertion Loss  
Optical Path Reversibility  
High Reliability



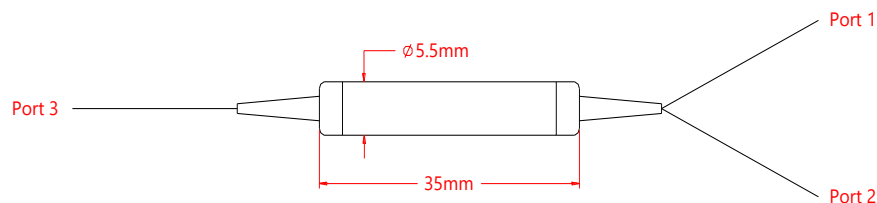
### Specification:

| Parameter                       | Symbol                | Value                           | Unit |
|---------------------------------|-----------------------|---------------------------------|------|
| Center Wavelength               | $\lambda$             | 1040                            | nm   |
| Bandwidth                       | BW                    | $\pm 20$                        | nm   |
| Typ. Insertion Loss             | IL                    | 0.6                             | dB   |
| Max. Insertion Loss             | IL                    | 0.8                             | dB   |
| Min. Extinction Ratio (For PBS) | ER                    | 22                              | dB   |
| Min. Directivity                |                       | 50                              | dB   |
| Min. Return Loss                | RL                    | 50                              | dB   |
| Max. Optical Power (CW)         | P                     | 500                             | mW   |
| Max. Tensile Load               |                       | 5                               | N    |
| Fiber Type                      | For Port 1 and Port 2 | PM Panda fiber                  | -    |
|                                 | For Port 3            | PM Panda fiber or HI 1060 fiber | -    |
| Operating Temperature           | T                     | -5~70                           | °C   |
| Storage Temperature             | T                     | -40~85                          | °C   |
| Package Dimension               |                       | $\Phi 5.5 \times L35$           | mm   |

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower, ER will be 2dB lower, slow axis is default aligned to the connector key.

### Drawing:



### Ordering Information (Part Number):

| PBCS- <b>WWW</b> - <b>FF</b> - <b>J</b> - <b>LL</b> - <b>CC</b> |                                 |                      |              |              |
|-----------------------------------------------------------------|---------------------------------|----------------------|--------------|--------------|
| <b>WWW</b>                                                      | <b>FF</b>                       | <b>J</b>             | <b>LL</b>    | <b>CC</b>    |
| Wavelength                                                      | Fiber Type on Port 3            | Fiber Jacket         | Fiber Length | Connector    |
| 1020 - 1020nm                                                   | H1 - HI 1060 Fiber              | B - 250um Bare Fiber | 05 - 0.5m    | NE - None    |
| 1030 - 1030nm                                                   | PM - PM Panda Fiber,            | 9 - 900um Loose Tube | 10 - 1.0m    | FA - FC/APC  |
| 1040 - 1040nm                                                   | Slow Axis Aligned to Port 1     | 2 - 2.0mm Loose Tube | 15 - 1.5m    | FU - FC/UPC  |
| 1050 - 1050nm                                                   | P4 - PM Panda Fiber,            | 3 - 3.0mm Loose Tube | 20 - 2.0m    | SA - SC/APC  |
| 1053 - 1053nm                                                   | Slow Axis 45° Aligned to Port 1 |                      | SS - Specify | SU - SU/APC  |
| 1060 - 1060nm                                                   |                                 |                      |              | LA - LC/APC  |
| 1064 - 1064nm                                                   |                                 |                      |              | LU - LC/UPC  |
| 1080 - 1080nm                                                   |                                 |                      |              | SS - Specify |
| SSSS - Specify                                                  |                                 |                      |              |              |