

## 1610~1790nm 2x2 Polarization Beam Combiner/Splitter

### FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability
- Various Bandwidth
- High Optical Power

### APPLICATIONS

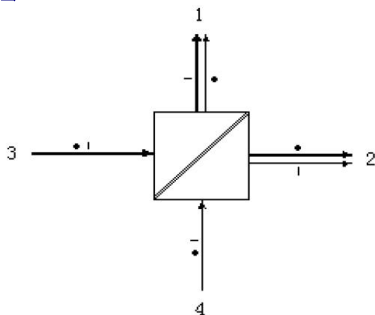
- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Research Labs
- Laser Systems

### SPECIFICATIONS

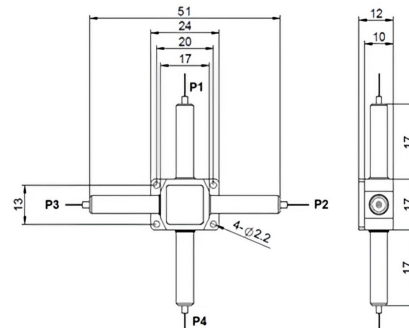
| Parameter   | Unit      | Value   |  |
|---|-----------|---|--|
| Center Wavelength   | nm        | 1625, 1650, 1700, 1730, 1750, 1790  |  |
| Bandwidth   | nm        | +/-10   |  |
| Insertion Loss (Port 3 to Port 1/2 at Slow Axis, Port 4 to Port 1/2 at Fast Axis) | (Typ.) dB | 1.0   |  |
|   | (Max.) dB | 1.5   |  |
| Optical Return Loss   | dB        | ≥45   |  |
| Extinction Ratio (for FPDS)   | (Typ.) dB | 22  |  |
|   | (Min.) dB | 20  |  |
| Fiber Type of Port 1 & Port 2   | -         | PM1550 Panda Fiber or 10/125um PMSC Fiber (E)<br>10/125um PMDC Fiber (O), 12/130um PMDC Fiber (T)<br>25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G) |  |
| Fiber Type of Port 3 & Port 4   | S Type    | -   | Corresponding SM Fiber   |
|   | P Type    | -   | Same Fiber to Port1&2, Slow axis align to Port 1 Slow/Fast axis  |
|   | Q Type    | -   | Same Fiber to Port1&2, Slow axis is 45° to Port 1 Slow/Fast axis |
| Fiber Tensile Load  | N         | 5   |  |
| Max. Optical Power (CW)   | mW        | 300   |  |
| Operating Temperature   | °C        | 0~50  |  |
| Storage Temperature   | °C        | -40~85  |  |

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
  - Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.
  - Package size may be different for different fiber type.

### LIGHT ROUTE



### PACKAGE DIMENSION



### ORDERING INFORMATION (PN) FPDC=Polarization Beam Combiner; FPDS=Polarization Beam Splitter.

| FPDC / FPDS | NNNN<br><i>Center Wavelength</i> | C<br><i>3rd Port Fiber</i> | C<br><i>4th Port Fiber</i> | C<br><i>Fiber Type</i> | C<br><i>Fiber Sleeve</i> | NN<br><i>Fiber Length</i> | CC/CCC<br><i>Connector Type</i> |
|-------------|----------------------------------|----------------------------|----------------------------|------------------------|--------------------------|---------------------------|---------------------------------|
|             | 1625~1625nm                      | S=S Type                   | S=S Type                   | 2-PM1550Fiber          | B= Bare fiber            | 05=0.5m                   | N=Without Connector             |
|             | 1700~1700nm                      | P=P Type                   | P=P Type                   | E=10/125 PMSC Fiber    | L= Loose Tube            | 10=1.0m                   | FC/APC=FC/APC Connector         |
|             | 1730~1730nm                      | Q=Q Type                   | Q=Q Type                   | T=12/130 PMDC Fiber    | 2= 2mm Cable             | 15=1.5m                   | LC/PC=LC/PC Connector           |
|             | 1790~1790nm                      |                            |                            | G=25/300 PMDC Fiber    | 3= 3mm Cable             | 20=2.0m                   | SC/UPC=SC/UPC Connector         |