

# Polarization Maintaining Inline Optical Isolator

### **FEATURES**

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- Low Profile Packaging

#### **APPLICATIONS**

- Fiber Optic Amplifiers
- Fiber Optic Instruments
- WDM Systems
- High Reliability and Stability Transmitters and Fiber Lasers
  - CATV Networks



## **SPECIFICATIONS**

| Parameter                  |                            | Unit | Single Stage   | Dual Stage |  |  |
|----------------------------|----------------------------|------|--|------------|--|--|
| Center Wavelength (        | (c)                        | nm   | 1310, 1480, 1550, 1590   |            |  |  |
| Peak Isolation (Typ.)      |                            | dB   | 42   | 58         |  |  |
| Isolation (λc+/-15nm       | , 23°C)                    | dB   | ≥32  | ≥45        |  |  |
| Insertion Loss (λc, 23     | в°С)                       | dB   | ≤0.4   | ≤0.5       |  |  |
| Insertion Loss (λc+/-      | 20nm, 0-70°C)              | dB   | ≤0.55  | ≤0.65      |  |  |
| Optical Return Loss (      | Input/Output)              | dB   | 55/50  | 55/50      |  |  |
| Extinction Ratio           |                            | dB   | ≥20  |            |  |  |
| Working Mode               | S Type                     | -    | Can only work in Slow Axis   |            |  |  |
|                            | F Type                     | -    | Can work both in Slow Axis and Fast Axis   |            |  |  |
| Fiber Type                 |                            | -    | PM1310/1550 Panda Fiber, 10/125um PMDC Fiber (O)<br>12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q)<br>25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G) |            |  |  |
| Fiber Tensile Load         |                            | N    | 5  |            |  |  |
| Maximum Optical Power (CW) |                            | mW   | 300  |            |  |  |
| Operating Temperature      |                            | °C   | 0~70   |            |  |  |
| Storage Temperature        |                            | °C   | -40~85   |            |  |  |
| Package Dimension          | Stainless Steel Tube (SST) | mm   | (Ø)5.5x35  |            |  |  |
|                            | Metal Box                  | mm   | (L)120x(W)12x(H)10   |            |  |  |

Note: 1. Specifications are for device without connectors; Specifications may change without notice.

- 2. To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
- 3. 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.

## **ORDERING INFORMATION (PN)**

| FPIS-NNNN         | - C             | С         | -( <mark>C</mark> )  | C                           | С            | NN                    | - CC/CCC                |
|-------------------|-----------------|-----------|----------------------|-----------------------------|--------------|-----------------------|-------------------------|
| Center Wavelength | Stage           | Туре      | Package              | Fiber Type                  | Fiber Sleeve | Fiber Length          | Connector Type          |
| 1310-1310nm       | S= Single Stage | S= S Type | M=Metal Box          | 2=PM1310/1550 Fiber         | B=Bare Fiber | <mark>05=</mark> 0.5m | N-Without Connector     |
| 1550= 1550nm      | D= Dual Stage   | F= F Type | <i>Blank</i> for SST | <b>0=</b> 10/125 PMDC Fiber | L=Loose Tube | 10=1.0m               | FC/APC=FC/APC Connector |
| 1480-1480nm       |                 |           |                      | T=12/130 PMDC Fiber         | 2=2mm Cable  | 15=1.5m               | LC/PC=LC/PC Connector   |
| 1590=1590nm       |                 |           |                      | R=25/250 PMDC Fiber         | 3= 3mm Cable | 20=2.0m               | SC/UPC=SC/UPC Connector |



