# 2030~2070nm PM Inline Optical Isolator for Pulse Power

#### **FEATURES**

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

### **APPLICATIONS**

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



## **SPECIFICATIONS**

| Parameter                              |                            | Unit | Single Stage                                       | Dual Stage                       | H Stage                      |  |  |
|--|----------------------------|------|--|----------------------------------|------------------------------|--|--|
| Working Wave                           | elength (λ)                | nm   | 2030±20, 2050±20, 2070±10                          |                                  |                              |  |  |
| Isolation (λ, 2                        | 3°C)                       | dB   | ≥16  | ≥30                              | ≥25                          |  |  |
| Insertion Loss                         | (λ, 23°C)                  | dB   | ≤1.3   | ≤1.6                             | ≤1.6                         |  |  |
| Optical Return                         | Loss (Input/Output)        | dB   | 50/45  | 50/45 50/45 50/45                |                              |  |  |
| Extinction Ratio                       |                            | dB   | ≥18  |                                  |                              |  |  |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | S Type                     | -    | Can only work in Slow Axis                         |                                  |                              |  |  |
| Working Mode                           | F Type                     | -    | Can work both in Slow Axis and Fast Axis           |                                  |                              |  |  |
|  |                            |      | PM1550 Panda Fiber or PM1950 Fiber (V)             |                                  |                              |  |  |
| Fiber Type                             |                            | -    | 10/130um PMDC Fiber (O) or 25/250um PMDC Fiber (R) |                                  |                              |  |  |
| Fiber Tensile L                        | _oad                       | N    | 5  |                                  |                              |  |  |
| Max. Average                           | Optical Power              | W    | 0.3, 0.5, 1, 2                                     |                                  | 3, 5, 10, 15, 20, 30, 40, 50 |  |  |
| Max. Peak Pov                          | ver for pulse              | kW   | 0.1, 1, 2, 3, 5, 10, 15, 20                        |                                  |                              |  |  |
| Operating Ten                          | nperature                  | °C   | 0~50   |                                  |                              |  |  |
| Storage Temperature                    |                            | °C   | -20~75   |                                  |                              |  |  |
| Package                                | Stainless Steel Tube (SST) | mm   | <sup>Ф</sup> 5.!                                   | 5x <sup>L</sup> 35               | Can Durawing                 |  |  |
| Dimension                              | Metal Box-M                | mm   | <sup>L</sup> 120x <sup>\</sup>                     | <sup>V</sup> 12x <sup>H</sup> 10 | See Drawing                  |  |  |

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. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
- 4. 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.
  - 5. Package size may be different for different power and fiber type.

#### **PACKAGE DIMENSION (H STAGE)**



## **ORDERING INFORMATION (PN)**

| FPIS-NNNN         | - <b>C</b>      | C         | -H NN         | PNN        | - (C)                | С                           | С             | NN           | - CC/CCC                |
|-------------------|-----------------|-----------|---------------|------------|----------------------|-----------------------------|---------------|--------------|-------------------------|
| Center Wavelength | Stage           | Туре      | Average Power | Peak Power | Package              | Fiber Type                  | Fiber Sleeve  | Fiber Length | Connector Type          |
| 2030= 2030nm      | S= Single Stage | S= S Type | 03=300mW      | 01= 100W   | M=Metal Box          | 2=PM1550Fiber               | B= Bare fiber | 05=0.5m      | N=Without Connector     |
| 2050= 2050nm      | D= Dual Stage   | F= F Type | 1 = 1W        | 1-1kW      | <i>Blank</i> for SST | V=PM1950 Fiber              | L= Loose Tube | 10=1.0m      | FC/APC=FC/APC Connector |
| 2070= 2070nm      | H= H Stage      |           | 5= 5W         | 5=5kW      | or >2W Power         | <b>0=</b> 10/130 PMDC Fiber | 2= 2mm Cable  | 15=1.5m      | LC/PC=LC/PC Connector   |
|                   |                 |           | 10-10W        | 10-10kW    |                      | R=25/250 PMDC Fiber         | 3= 3mm Cable  | 20=2.0m      | SC/UPC=SC/UPC Connector |





