

1053nm Polarization Maintaining Isolator

FEATURES

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

APPLICATIONS

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



SPECIFICATIONS

| Parameter | Unit | Single Stage | Dual Stage |
|--|----------------------------|--|--|
| Center Wavelength (λ_c) | nm | 1053 | |
| Bandwidth | nm | +/-10 | |
| Peak Isolation (Typ.) | dB | 30 | 55 |
| Isolation ($\lambda_c \pm 10\text{nm}$, 23°C, All SOP) | dB | ≥ 25 | ≥ 45 |
| Typical Insertion Loss (λ_c , 23°C, All SOP) | dB | 2.2 | 3.6 |
| Insertion Loss (λ_c , 0-50°C, All SOP) | dB | ≤ 2.8 | ≤ 4.3 |
| Optical Return Loss (Input/Output) | dB | 50/50 | 50/50 |
| 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 | - | PM980 Fiber, PM1060L Fiber (E) or PM1060L-FA Fiber (L) 10/125um PMDC Fiber (O), 15/130um PMDC Fiber (W) 20/130um PMDC Fiber (Q) or 25/250um PMDC Fiber (R) | |
| Fiber Tensile Load | N | 5 | |
| Maximum Optical Power (CW) | mW | 200 | |
| Operating Temperature | °C | 0~50 | |
| Storage Temperature | °C | -40~85 | |
| Package Dimension | Stainless Steel Tube (SST) | mm | (\varnothing)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 0.5dB 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 | C | - | (C) | C | C | NN | - | CC/CCC |
| <i>Center Wavelength</i> | | | <i>Stage</i> | <i>Type</i> | | <i>Package</i> | <i>Fiber Type</i> | <i>Fiber Sleeve</i> | <i>Fiber Length</i> | | <i>Connector Type</i> |
| 1053=1053nm | | | S= Single Stage | S= S Type | | M= Metal Box | 2= PM980 Fiber | B= Bare fiber | 05= 0.5m | | N= Without Connector |
| | | | D= Dual Stage | F= F Type | | Blank for SST | E= PM1060L Fiber | L= Loose Tube | 10= 1.0m | | FC/APC= FC/APC Connector |
| | | | | | | | Q= 20/130 PMDC Fiber | 2= 2mm Cable | 15= 1.5m | | LC/PC= LC/PC Connector |
| | | | | | | | R= 25/250 PMDC Fiber | 3= 3mm Cable | 20= 2.0m | | SC/UPC= SC/UPC Connector |