

## (Compact) 1080nm High Power In line Optical Isolator -2W

### Key Features

- Low Insertion Loss
- High Power Handling
- High Isolation
- PM and Non-PM are available
- Fiber can be customized
- High Reliability
- Excellent Temperature Stability

This compact 1080nm High Power In-line Optical Isolator -2W is made of Faraday, not TGG crystals, so the size is compact and cost is lower.

High power isolator series includes in-line type, beam expanded isolator, fiber in and free space out isolator and free space isolator etc. they're characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. They are ideal for fiber laser and instrumentation applications.

If you do not see a standard isolator that meets your needs, we welcome the opportunity to review your desired specification and quote a custom isolator. Requests for custom fiber pigtailed, different wavelengths and handling power of operation or other specific needs will be readily addressed.

### Applications

- High Power Fiber Lasers
- High Power Fiber Amplifier
- Instrumentation
- Test and Measurement
- Fiber Amplifier Lab Research



## For more Info

### Please contact us at:

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<https://www.dkphotonics.com>

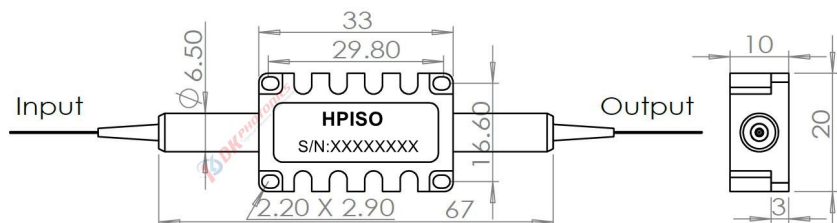
Add.:

4F, Bldg. 18, Qinghu Industrial Park,

Dahe Road, Longhua Dis.,

Shenzhen, China 518109

### Package Dimension



\*Due to ongoing design improvements, the package size is subject to change. Please contact DK Photonics for confirmation if you have special requirements.

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### Performance Specifications

Parameters	Unit	Values
Central Wavelength	nm	1080
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	35
Min. Isolation in Band (at 25°C)	dB	28
Typ. Insertion Loss (at 25°C)	dB	1.7
Max. Insertion Loss (at 25°C,100mW)	dB	2.0
Max. Insertion Loss (at 25°C,1W)	dB	2.5
Max. Insertion Loss (at 0~50°C,2W)	dB	3.0
Max. PDL (for SM fiber)	dB	0.15
Min. Extinction Ratio (for PM fiber)	dB	18(Type B), 20(Type F)
Min. Return Loss	dB	50
Max. Power Handling (CW)	W	1,2
Max. Peak Power for ns Pulse	kW	5, 10(for typical pulse application)
Max. Tensile Load	N	5
Fiber Type	-	SM: 1060-XP, 10/125; etc. PM: PM980-XP or PM1060L; PM 10/125 DC
Operating Temperature	°C	0 ~ + 50
Storage Temperature	°C	-40 ~ +85

- Above specification are for device without connector, and may change without notice.
- IL is 0.3 dB higher and RL is 5 dB lower, ER is 2dB lower (PM type) for each connector added.
- The pass optical power is 2 W only for connector added, the connector is only used for performance testing at low power, higher power requires splicing fibers.
- Type B: Both axis working, Type F: Fast axis blocked, the default is Type B if without request (Only for PM type)
- If there is pulse application, please be sure to inform us of pulse energy and peak power.

### Order information

P/N: CHPPMI (CHPPMI-B/F)-①-②-③-④-⑤-⑥ (CHPPMI-B/F: Compact High Power Polarization Maintaining Isolator)

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250µm bare fiber pigtail. For high power applications, we recommend direct splicing without connectors.

①	②	③	④	⑤	⑥
Wavelength	Optical Power	Power Type	Fiber Type	Pigtails Diameter	Fiber Length
64:1064nm	01:1W	P: Pulsed	XXX: fiber code	25: bare fiber	08:0.8m
80:1080nm	02:2W	C: Continuous Wave		90:900µm Loose Fiber	10:1.0m
XX: Other				XX: Others	XX: Other

**Part Number Example #1:** CHPPMI-80-01-P-06X-25-10-00

**Description:** Compact 1080nm High Power Polarization Independent Isolator, Max.1W power handling, <10kW Pulsed power, 1060-XP bare fiber ,1.0m length fiber pigtails, without connector at all ports.

**Part Number Example #2:** CHPPMI-F-80-02-P-P98X-25-10-00

**Description:** Compact 1080nm High Power Polarization Maintaining Isolator, Fast axis blocked, Max.2W power handling, <10kW Pulsed power, PM980 bare fiber ,1.0m length fiber pigtails, without connector at all ports.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.