# High Power Component Series



#### **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

### **Applications**

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

#### 2000nm High Power PM In-line Optical Isolator

The 2000nm High Power PM In-line Optical Isolator 30W is a compact, high performance light wave Polarization Maintaining component that allow light to be transmitted in one direction only and does not change its polarization state. They're characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. Optical Isolators are optical devices that allow light to be transmitted in one direction only. They are most often used to prevent any reflected light from entering the source, thus preventing any feedback problems; it has been widely used in fiber laser system.

PM and non-PM types are available, fiber can be customized, with power conditions of CW or Pulse and Power Handling of 5W, 10W, 20W, 30W can be customized.

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 pigtails, different wavelengths and handling power of operation or other specific needs will be readily addressed.



# For more Info

#### Please contact us at:

Tel: +86-755-23736280 Fax: +86-755-26746512

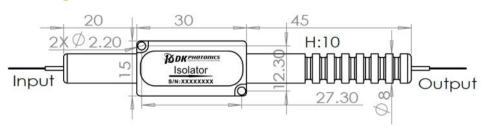
E-mail: sales@dkphotonics.com

https://www.dkphotonics.com

Add.:

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#### **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.





#### 2000nm High Power PM In-line Optical Isolator

#### **Performance Specifications**

Parameters	Unit	Values	
Central Wavelength	nm	1940, 2000, 2050	
Operating Wavelength Range	nm	±30	
Typ. Peak Isolation	dB	28	
Min. Isolation (at 25°C, λc ± 50 nm)	dB	16	
Typ. Insertion Loss	dB	0.8	
Max. Insertion Loss (at 25°C, λc ± 20 nm)	dB	1.2	
Min. Extinction Ratio (for PM fiber)	dB	18(Type B), 20(Type F)	
Min. Return Loss	dB	50	
Max. Power Handling (CW)	W	10, 15	
Max. Peak Power for ns Pulse	kW	5, 10, 20 (for typical pulse application)	
Max. Tensile Load	N	5	
Fiber Type	-	PM1550 or PM1950, PM-GDF-10/130-2000-M, PLMA-GDF-25/250-09M fiber	
Operating Temperature	°C	0 ~ + 70	
Storage Temperature	°C	-40 ~ +85	

- 1. Above specification are for device without connector and may change without notice.
- 2. IL is 0.3 dB higher and RL is 5 dB lower, ER is 2dB lower (PM type) for each connector added.
- 3. 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.
- 4. Type B: Both axis working, Type F: Fast axis blocked, the default is Type B if without request (Only for PM type).
- 5. If there is pulse application, please be sure to inform us of pulse energy and peak power.

## **Order information** P/N: HPPMI-B/F-(1)-(2)-(3)-(4)-(5)-(6)

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	<b>⑤</b>	6	7
Wavelength	Optical Power	Power Type	Fiber Type	Pigtails Diameter	Fiber Length	Connector
1940:1940nm 2000:2000nm 2050:2050nm XX: Others	10:10W 20:15W XX: Other	P: Pulsed C: Continuous Wave	XXX: fiber code	25: bare fiber 90:900µm Loose Fiber XX: Others	08:0.8m 10:1.0m XX: Other	00: None FP: FC/PC FA: FC/APC XX: Others

Part Number Example: HPPMI-F-2000-15-P-P10/130/15D-25-08-00

**Description:** 2000nm High Power PM In-line Optical Isolator, 15W, <20kW pulsed power, PM-GDF-10/130-2000-M fiber, with bare fiber & 0.8m length, no connector.

## **Ordering Information for Custom Parts**

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