

1040nm High Power TGG Isolator & Band Pass Filter Hybrid Combination

Key Features

- Low Insertion Loss
- High Extinction Ratio
- High isolation
- Excellent stability and reliability

The High-power Isolator &BPF is a combination of a BPF and a TGG based isolator in a single package. The BPF & isolator features low insertion loss, high isolation and high reliability and stability. The device guides optical light in one direction and block out unwanted noise signals, eliminates back reflection and back scattering in the reverse direction. The device can be built with bare fiber, or 900um jacket cable. The BPF Isolator is widely used in amplifier systems, fiber optic systems and fiber lasers.

If you do not see a standard BPF & isolator that meet 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. DK Photonics can respond to custom requirements with short lead times.

Applications

- Fiber laser
- Fiber amplifier
- Fiber Sensor
- Communications



For more Info

Please contact us at:

Tel: +86-755-23736280

Fax: +86-755-26746512

E-mail: sales@dkphotonics.com

<https://www.dkphotonics.com>

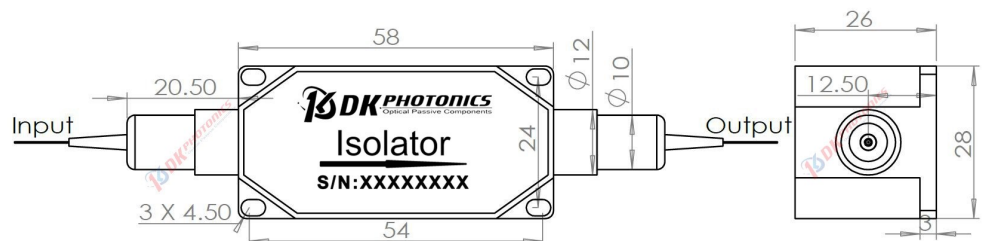
Add.:

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 | 1040 |
| Min. Pass bandwidth@0.5dB | nm | 2.2 |
| Min. Stop bandwidth@25dB down | nm | 6 |
| Typ. Peak Isolation | dB | 35 |
| Min. Isolation in Band (at 25°C) | dB | 26 |
| Typ. Insertion Loss | dB | 1.0 |
| Max. Insertion Loss (at 25°C) | dB | 1.5 |
| Max. PDL (for SM fiber) | dB | 0.15 |
| Min. Return Loss | dB | 45 |
| Maximum Power Handling (continuous wave) | W | 0.5,1, 2, 5,10 |
| Max. Peak Power for Pulse | kW | 1, 5,10 |
| Max. Tensile Load | N | 5 |
| Fiber Type | - | 1060-XP, 10/125 SC fiber |
| Operating Temperature | °C | 0 ~ + 70 |
| Storage Temperature | °C | -40 ~ +85 |

- Above specification are for device without connector and may change without notice. Other center wavelengths and bandwidths can also be customized, but MOQ is required, please contact us.
- IL is 0.3 dB higher and RL is 5 dB lower for 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.
- If there is pulse application, please be sure to inform us of pulse energy and peak power.
- For high continuous power, we will add a port to export the blocked forward signal light to reduce the heat dissipation of the device. The user only needs to export it to the heat dissipation shell when using it.

Order information P/N: HPISO&BPF-①-②-③-④-⑤-⑥-⑦-⑧

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 | ⑦ | ⑧ |
|------------|-----------------|--------------------------------|-------------------------------|--------------------------------|---|----------------------|---|
| Wavelength | Pass band-width | Optical Power | Power Type | Fiber Type | Pigtails Diameter | Fiber Length | Connector Type |
| 40:1040nm | 2:2.2nm | 1:1W 3:3W 5:5W 10:10W | P:Pulsed C:Continuous Wave | 06X: 1060-XP XX: fiber code | 25:250μm bare fiber 90:900μm Loose Fiber XX: Others | 10:1.0m XX: Other | 00: None FP: FC/PC FA: FC/APC XX: Others |

Part Number Example: HPISO&BPF-40-2-5-P-06X-25-10-00

Description: TGG Based 1040nm Optical TGG Isolator&BPF, 2nm pass bandwidth, 5W power handling, pulsed power<5kW, 1060-XP fiber, bare fiber, 1.0m length fiber pigtails, no connector at all ports.

Ordering Information for Custom Parts

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