

1064nm TGG Based High Power Optical Circulator-100W 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

The TGG Based Optical Circulator is a high-performance light-wave component that routes incoming signals from Port 1 to Port 2, and incoming Port 2 signals to Port 3. They're characterized with low insertion loss, high isolation, high power handling, high return loss, low PDL, low PMD, excellent environmental stability and reliability. They are ideal for fiber laser and instrumentation applications.

If you do not see a standard circulator that meets your needs, we welcome the opportunity to review your desired specification and quote a custom circulator. 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
- Pump Laser Source
- Test and Measurement
- Instrumentation



For more Info

Please contact us at:

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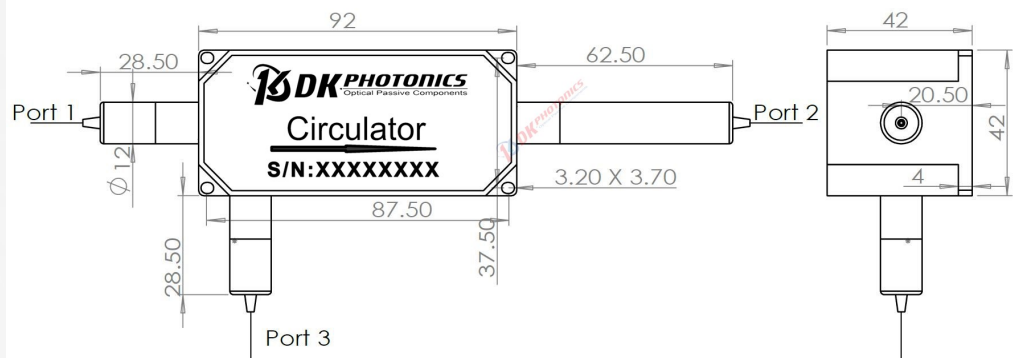
Add.:

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
Operation Wavelength	nm	1064
Operating Wavelength Range	nm	±10
Typ. Peak Isolation	dB	30
Min. Isolation, λ_c , 23 °C	dB	25
Typ. Insertion Loss, 23 °C	dB	0.5
Max. Insertion Loss, 23	dB	0.8
Max. PDL (for SM fiber)	dB	0.15
Min. Extinction Ratio (for PM fiber)	dB	18(Type B), 20(Type F)
Min. Crosstalk (Port 1->Port 3)	dB	45 (Typ. 50)
Min. Return Loss	dB	45
Power Handling (total pass)	W	10, 20, 30
Max. Peak Power for ns Pulse	kW	10, 20 (for typical pulse application)
Max. Tensile Load	N	5
Fiber Type	-	25/250 DC Fiber,30/250 DC Fiber,20/400 DC fiber, PM or No-PM, or other
Operating Temperature	°C	0 ~ +60
Storage Temperature	°C	-10 ~ +75

- 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)

Order information P/N: HPPIOC (HPPMOC)-①-②-③-④-⑤-⑥-⑦ PMOC-B/F: PM fiber Optical Circulator)

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 bare fiber pigtail. For high power applications, we recommend direct splicing without connectors.

①	②	③	④	⑤	⑥	⑦
Port	Operating Wavelength	Power Handling	Fiber Type	Pigtail Diameter	Fiber Length	Connector
3:3-port	30:1030nm	30:30W	xxx: fiber code	25:250μm bare fiber	05:0.5m	00: None
	64:1064nm	50:50W		90:900μm Loose fiber	10:1.0m	FP: FC/PC
	80:1080nm	100:100W		XX: Others	15:1.5m	FA: FC/APC
					XX: Others	XX: Others

Part Number Example: HPPIOC-3-64-50-25/250/06D-25-10-00

Description: 1064nm 3-port High Power Polarization Insensitive Optical Circulator, 50W power handling, 25/250μm, NA0.065/0.46 DC fiber, with bare fiber, 1.0m length fiber pigtails, without connectors.

Ordering Information for Custom Parts

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