



## 1080nm PM fiber TGG Faraday Mirror

### Key Features

- Low Insertion Loss
- High Return loss
- Epoxy Free Optical Path

The Faraday Mirror is a passive device that provides 45- or 90-degree rotation regarding to the polarization state of the input light. It is a fiber optic polarization rotation mirror designed for fiber optic networks and measurement applications. The device can help to eliminate polarization sensitivity of an optical fiber system. Applications include eliminating polarization induced fluctuations in fiber interferometers, Brillouin amplifier systems, fiber laser systems, and fiber optic antenna remoting systems. Our Faraday Mirror is optical path epoxy free and thus offers low insertion loss and high temperature stability.

### Applications

- Fiber Optical Amplifier
- Fiber optic Systems Testing



## For more Info

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### Package Dimensions



\*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

Parameter	Unit	Values
Center Wavelength	nm	1080
Operating Bandwidth	nm	±5
Max. Insertion Loss	dB	0.8(Typ. 0.5)
Faraday Rotation Angle (Single Pass)	degree	45
Rotation Angle Tolerance over Wavelength and Temperature	degree	+/-3.0
Min. PER	dB	18
Max. Optical Power	W	0.5, 1, 3, 5, 10
Fiber Type	-	PM980-XP, or other
Operation Temperature	°C	-5 ~ +70
Storage Temperature	°C	-40 ~ +85
Dimensions	mm	46x28x26

1. Above specification are for device without connector, and may change without notice.

2. For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower and ER will be 2dB lower. Power transmits through the connector less than 2W. The default connector key is aligned to slow axis.

### Order information P/N: PMTGGFM-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.

①	②	③	④	⑤	⑥
Wavelength	Faraday Rotation Angle	Optical Power	Pigtails Diameter	Fiber Length	Connector
80:1080nm	45:45°	L:<0.5W	25:250µm bare fiber	05:0.5m	00: None
XX: Others		1:1W	90:900µm Loose Fiber	10:1.0m	FP: FC/PC
		3:3W	XX: Others	15:1.5m	FA: FC/APC
		5:5W		XX: Others	XX: Others
		10:10W			

**Part Number Example:** PMTGGFM-80-45-1-25-10-00

**Description:** 1080nm PM TGG Faraday Mirror, Faraday rotation angle: 45°, 1W power, PM980-XP fiber, with bare fiber, 1.0m length fiber pigtails, and no connectors at all ports.

### Ordering Information for Custom Parts

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