

Polarizing Y-branch Phase Modulator [MD1000] for Fiber Optic Gyroscope

FIBERPRO's Polarizing Y-branch Phase Modulator (PPM) is high performance optical device specially designed for Fiber Optics Gyroscope (FOG).

It offers excellent intensity modulation (0.1%), low insertion loss, and high return loss - all superior to others in the market. Robust and rugged, it can be used in all types of harsh environments.

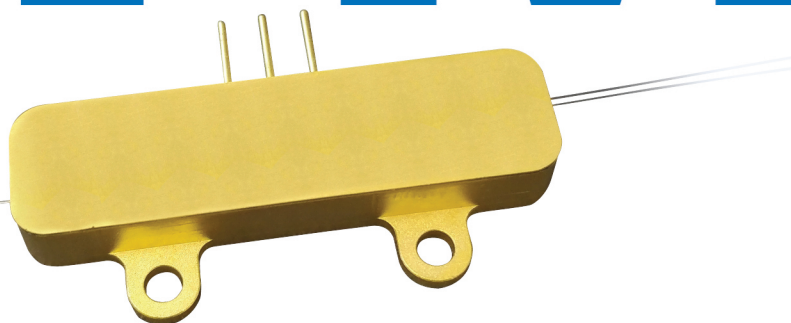
PPPM

Features

- Low-intensity modulation : 0.1%
- High PER : ≥ 60 dB
- Low Insertion Loss : ≤ 2.5 dB
- High Return Loss : ≥ 55 dB
- Low V_{π} : ≤ 4.0 V
- Reliable even in harsh environment

Applications

- Fiber optic gyroscope
- Sagnac interferometer-based sensors



Specifications

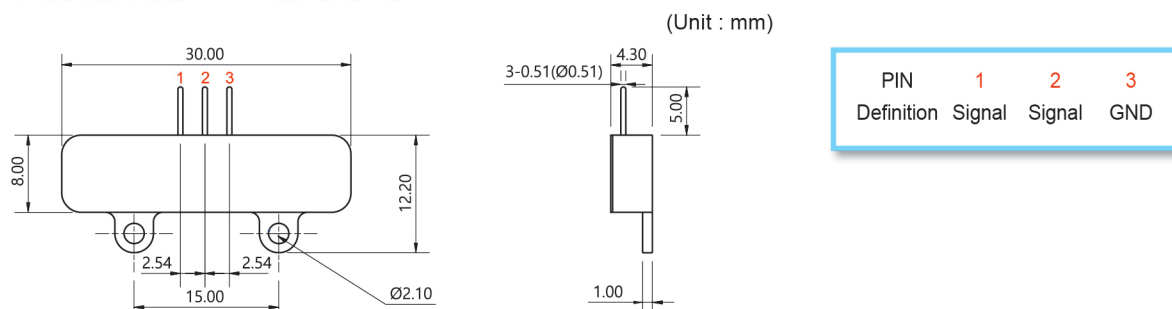
Optical	
Wavelength	1550 nm
Insertion Loss	≤ 2.5 dB
Split Ratio	48 % ~ 52 %
ORL (Optical Return Loss)	≥ 55 dB
PER (Polarization Extinction Ratio) of Chip	≥ 60 dB
PER Crosstalk	≥ 25 dB
Fiber Type	Bow-Tie
Polarization Direction ¹⁾	Fast
Fiber Length	1.5 meter on both Input & Output
Connector	No connector
Electrical	
Intensity Modulation	0.1 %
Half Wave Voltage ($V\pi$)	≤ 4.0 V
Bandwidth	300 MHz
Environmental	
Operating Temperature	-40°C ~ +85°C
Storage Temperature	-40°C ~ +85°C
Shock(MIL-STD-883F, Method 2002.4)	1,500 g(0.5 ms)
Vibration(MIL-STD-883F, Method 2007.3)	20 g(20 Hz to 2,000 Hz)

1) Check below definition of polarization directions

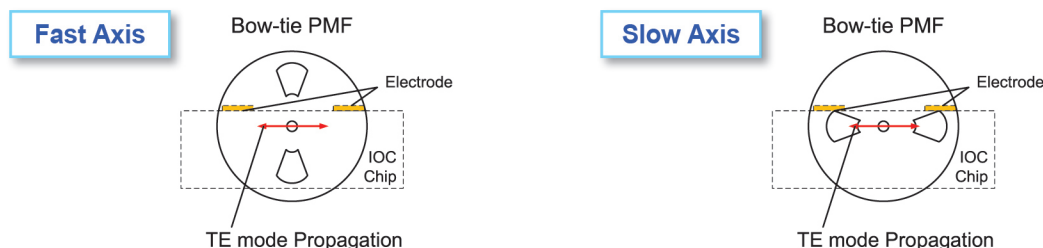
[Note] : Please contact FIBERPRO if different types(PM fiber, polarization direction, wavelength, connectors, etc) of device needed.

The specifications vary upon the type of device.

Mechanical Dimensions



Polarization Directions



FIBERPRO Headquarters
FIBERPRO USA
FIBERPRO CHINA
www.fiberpro.com

Tel : +82-42-360-0030
 Tel : +1-408-835-7796
 Tel : +86-27-8663-5497
sales@fiberpro.com

Fax : +82-42-360-0050
 Fax : +86-27-8663-5701