

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.

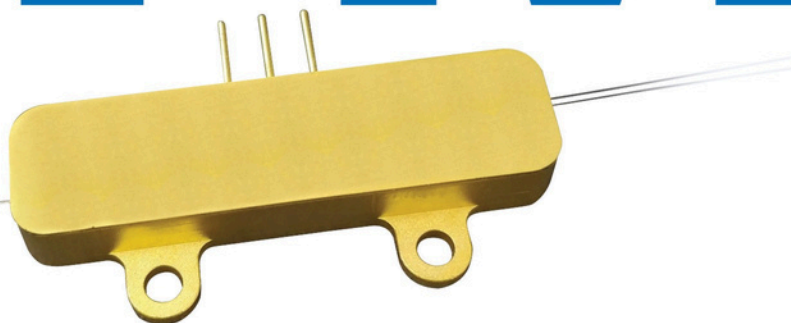
PPM

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



F I B E R P R O

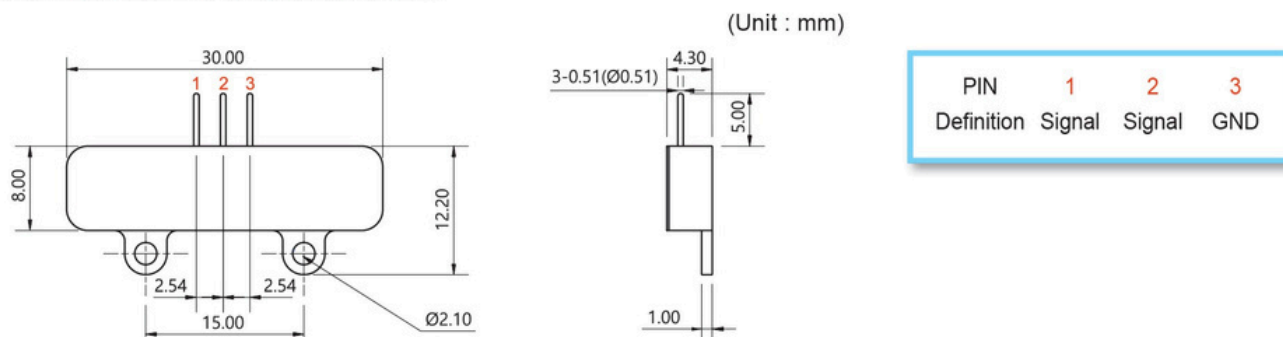
Specifications

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
Fibe 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_{π})	≤ 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

