

# PM-1064-0.2-S



## DEVICE

# 1064 nm Phase Modulator, 200 MHz

## OVERVIEW

The Optilab PM-1064-0.2-S is a high performance, 200 MHz LiNbO<sub>3</sub> phase modulator. It can provide phase modulation in a broad operation bandwidth with a ultra low driving voltage. Its low insertion loss provides for maximum transmission power. The PM-1064-0.2-S is fabricated with Annealed Proton Exchange (APE) optical waveguides, and uses polarization maintaining input and output fibers, making it easy to integrate with other optical components. Contact Optilab for more information.

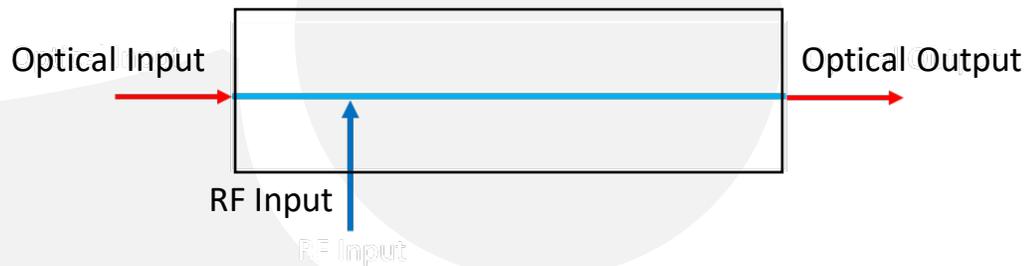
## FEATURES

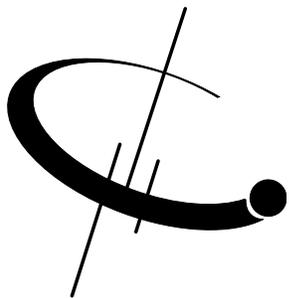
- 1030 nm to 1070 nm
- X-cut APE Process
- 200 MHz Bandwidth
- Ultra Low Drive Voltage
- Polarization Maintaining
- Low Optical Loss

## USE IN

- Coherent Communications
- Optical Chirping
- Optical Sensing
- FM Spectroscopy
- Frequency Shifting
- Laser Linewidth Broadening

## FUNCTION DIAGRAM





# PM-1064-0.2-S

## SPECIFICATIONS

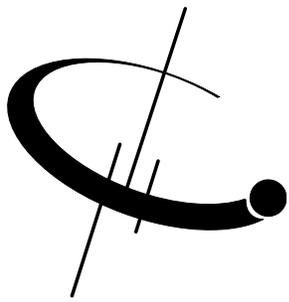
### GENERAL

Input Optical Power	300 mW max
Operating Wavelength	1030 nm to 1070 nm
Insertion Loss	3.0 dB typical, 3.5 dB max
Chip Polarization Extinction Ratio	> 60 dB
Pigtail Polarization Extinction Ratio	≥ 20 dB
Process	Annealed Proton Exchange
Optical Return Loss	≤ -45 dB
S <sub>21</sub> Bandwidth	100 MHz typical @ -3dB, 200 MHz usable
V <sub>π</sub>	1.3V typ., 1.6V max. @ 10 kHz
RF Input Voltage	10 V <sub>pp</sub> max
Impedance	High Z

### MECHANICAL

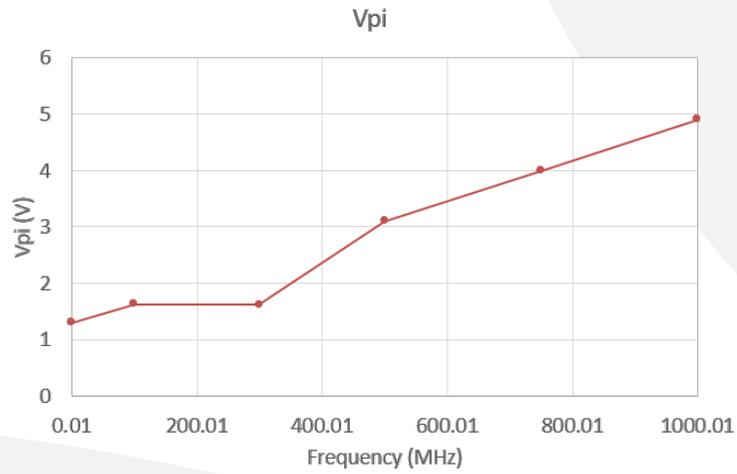
Operating Temperature	-25°C to +75°C
Storage Temperature	-50 °C to +90 °C
Operating Humidity	0% to 90% Relative Humidity
Input Fiber	Panda, PM98-U400, slow axis aligned to TE Mode
Output Fiber Type	Panda, PM98-U400, slow axis aligned to TE Mode
Input Connector	PM FC/APC, key aligned to slow axis
Output Connector	PM FC/APC, key aligned to slow axis
RF Port Connectors	SMA Female
Cabling	900 μm loose tubing
Dimension	96mm x 14mm x 8.6mm





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Vpi vs Frequency



## MECHANICAL DRAWING

Unit: mm

