

PM-1064-02-LD



DEVICE

1064 nm Phase Modulator, Low Drive, 2 GHz

OVERVIEW

The Optilab PM-1064-02-LD is a high performance, 2 GHz LiNbO3 phase modulator. It can provide phase modulation in a broad operation bandwidth with a low driving voltage. Its low insertion loss provides for maximum transmission power. The PM-1064-02-LD 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
- 2 GHz Bandwidth

- Minimal Back Reflections
- Polarization Maintaining
- Low Optical Loss

USE IN

- Coherent Communications
- Optical Chirping
- Optical Sensing

- FM Spectroscopy
- Frequency Shifting
- Laser Linewidth Broadening

FUNCTION DIAGRAM







PM-1064-02-LD

SPECIFICATIONS

GENERAL

Input Optical Power	60 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	≤ -40 dB
S ₂₁ Bandwidth	1.5 GHz min, 2 GHz typical 📵 -3 dB
S ₁₁ Return Loss	≤-10 dB
Vπ	4.5V typ. @ 1 GHz, 5V max. @ 1 GHz
RF Input Power	+25 dBm max
Impedance	50 Ω typical

MECHANICAL

Operating Temperature	-55°C to + 75°C
Storage Temperature	-60 °C to +90 °C
Operating Humidity	0% to 90% Relative Humidity
Input Fiber	Panda, PM 980, slow axis aligned to TE Mode
Output Fiber Type	Panda, PM 980, 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 tubing
Dimension	96mm x 14mm x 8.6mm





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TYPICAL S21 **RESPONSE**







