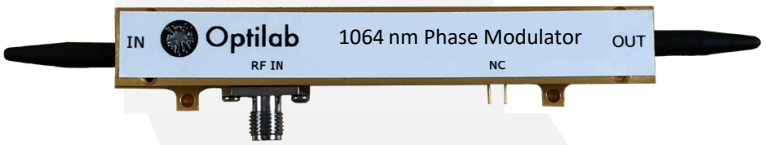
PM-1064-15



DEVICE

15 GHz, 1064 nm Phase Modulator

OVERVIEW

The Optilab PM-1064-15 is a high performance, 15 GHz $LiNbO_3$ phase modulator. PM-1064-15 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-1064-15 is fabricated with Proton Exchange (PE) optical waveguides, and uses polarization maintaining input and output fibers, making it easy to integrate with other optical components. Contact Optilab for more information.

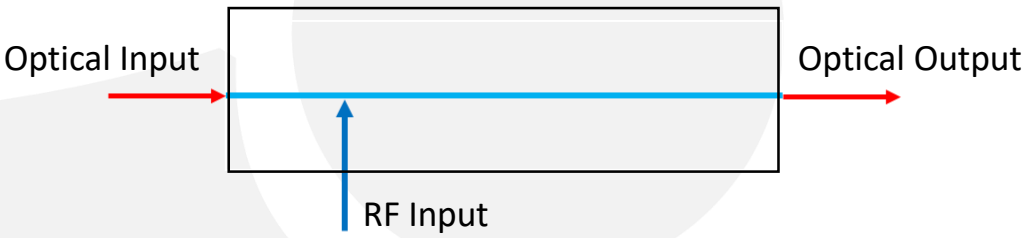
FEATURES

- 1030 nm to 1070 nm
- 15 GHz Bandwidth
- Low Optical Loss
- Minimal Back Reflections
- Polarization Maintaining

USE IN

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

FUNCTION DIAGRAM



PM-1064-15

SPECIFICATIONS

GENERAL

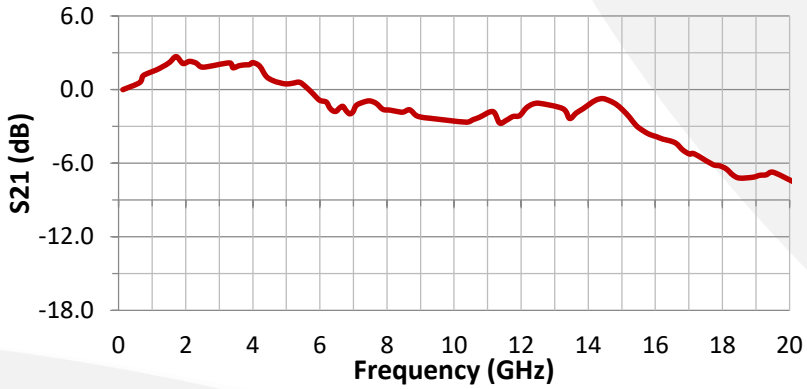
Input Optical Power	40 mW max
Operating Wavelength	1030 nm to 1070 nm
Insertion Loss	3.5 dB typical, 4 dB max
Chip Polarization Extinction Ratio	> 60 dB
Pigtail Polarization Extinction Ratio	≥ 20 dB
Process	Proton Exchange
Optical Return Loss	≥ 30 dB
S_{21} Bandwidth	15 GHz typical @ -3 dB
S_{11} Return Loss	≤-10 dB @ 10 GHz
Vπ	8.1 V typical @ 1 GHz 13.2 V typical @ 15 GHz
RF Input Power	+30 dBm max
Impedance	50 Ω typical

MECHANICAL

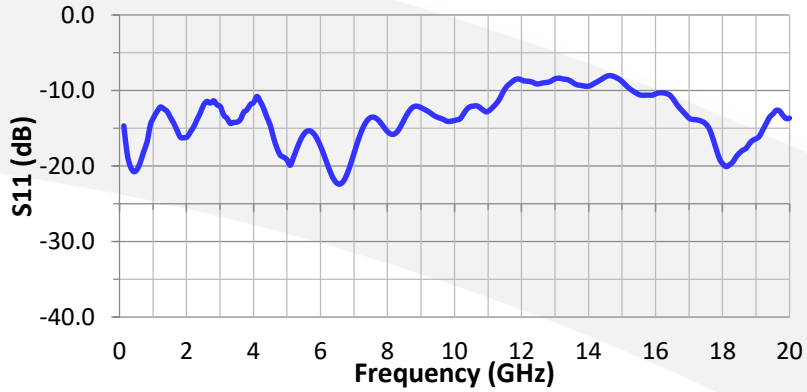
Operating Temperature	-55°C to + 75°C
Storage Temperature	-60 °C to +90 °C
Operating Humidity	0% to 90% Relative Humidity
Input Fiber	Panda, PM 980
Output Fiber Type	Panda, PM 980
Input Connector	PM FC/APC, others available
Output Connector	PM FC/APC; others available
RF Port Connectors	K Connector
Cabling	900 µm tubing
Dimension	3.783"x 0.981" x 0.640"

PM-1064-15

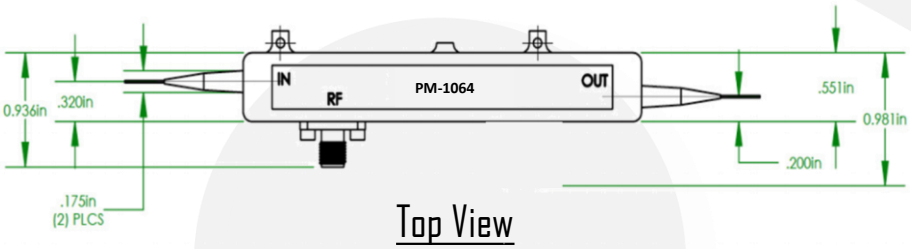
TYPICAL S21 RESPONSE



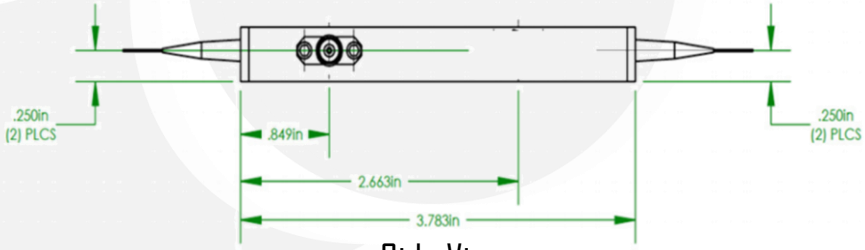
TYPICAL S11 RESPONSE



MECHANICAL DRAWING



Top View



Side View