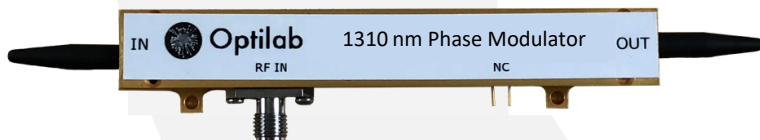


PM-1310-15



DEVICE

15 GHz, 1310 nm Phase Modulator

OVERVIEW

The Optilab PM-1310-15 is a high performance, 15 GHz LiNbO₃ phase modulator. PM-1310-15 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-1310-15 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.

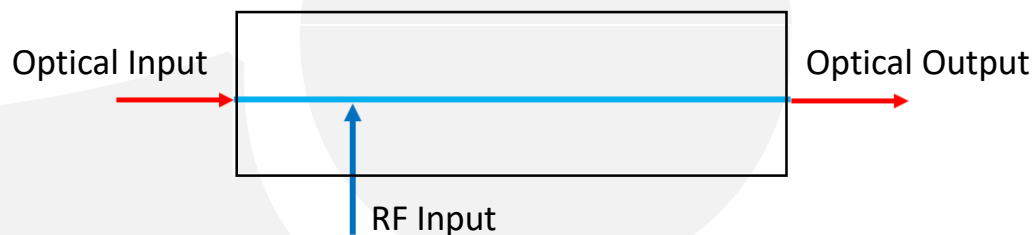
FEATURES

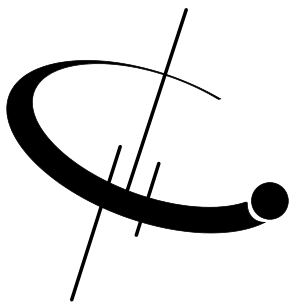
- 1270 nm to 1370 nm
- 15 GHz Bandwidth
- Low Optical Loss
- Minimal Back Reflections
- Polarization Maintaining

USE IN

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

FUNCTION DIAGRAM





PM-1310-15



SPECIFICATIONS

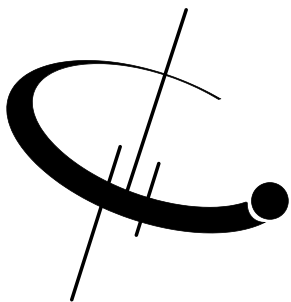
GENERAL

Input Optical Power	40 mW max
Operating Wavelength	1270 nm to 1370 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
V _π	8.5 V typical @ 1 GHz 15.5 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 13-U25D
Output Fiber Type	Panda, PM 13-U25D
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"

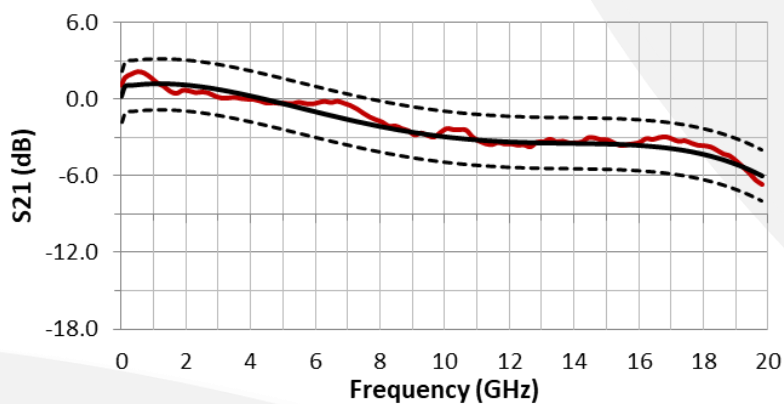




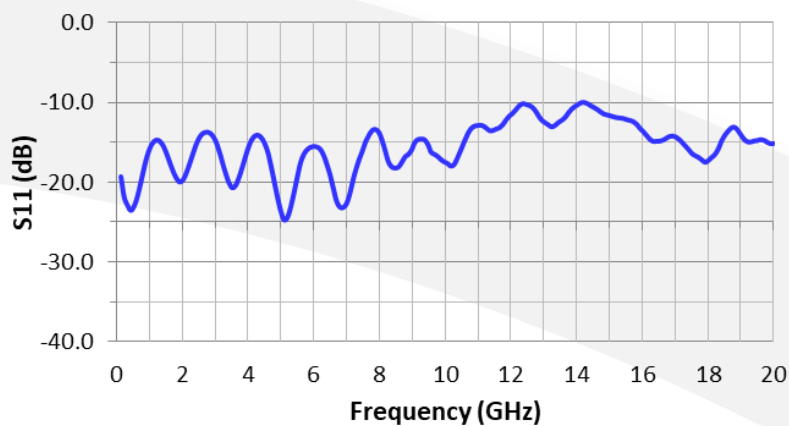
PM-1310-15



TYPICAL S21
RESPONSE



TYPICAL S11
RESPONSE



MECHANICAL
DRAWING

