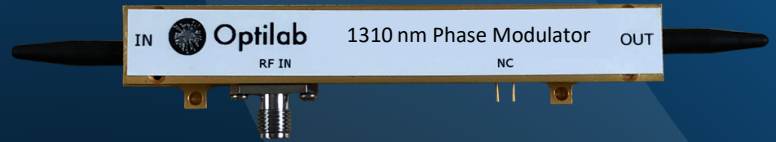




PM-1310-6



DEVICE

6 GHz 1310 nm Phase Modulator

OVERVIEW

The Optilab PM-1310-6 is a high performance, 6 GHz LiNbO₃ phase modulator. PM-1310-6 can provide phase modulation in a broad operation bandwidth with a low driving voltage. Its low insertion loss provides for maximum transmission power. PM-1310-6 is fabricated with Proton Exchange (PE) optical waveguides and features a chip Polarization Extinction Ratio (PER) of over 60 dB. The PM-1310-6 phase modulator uses polarization maintaining input and output fibers, making it easy to integrate with other optical components. Contact Optilab for more information.

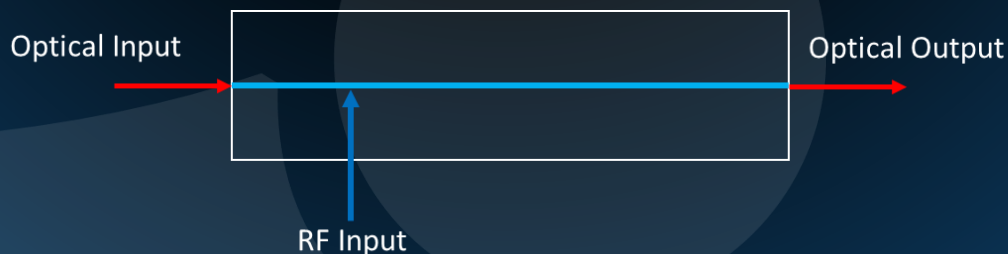
FEATURES

- 6 GHz Bandwidth
- Low Insertion Loss
- Low Drive Voltage
- 1270 nm to 1370 nm
- Minimal Back Reflections
- Chip PER over 60 dB

USE IN

- Optical Chirping
- Research & Development
- Laser Linewidth Broadening
- FM Spectroscopy
- Frequency Shifting

FUNCTION DIAGRAM





PM-1310-6

SPECIFICATIONS

Input Optical Power	100 mW max
Operating Wavelength	1270 nm to 1370 nm
Insertion Loss	3 dB typical, 3.5 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	6 GHz typical @ -3 dB
S ₁₁ Return Loss	≤ -15 dB @ 6 GHz
V _π	3.5 V typical @ 1 GHz 5.5 V typical @ 6 GHz
RF Input Power	+30 dBm max
Impedance	50 Ω typical

GENERAL

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	FC/APC; others available
Output Connector	FC/APC; others available
RF Port Connectors	K Connector, Female
Cabling	900 μm tubing
Dimension	3.783" x 0.981" x 0.640"

MECHANICAL

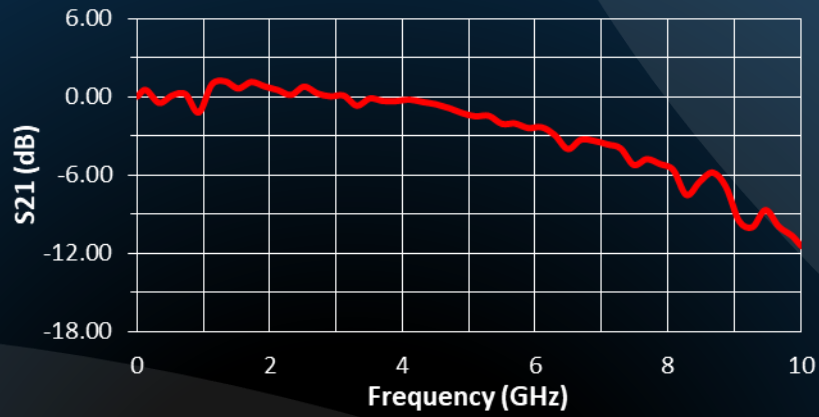


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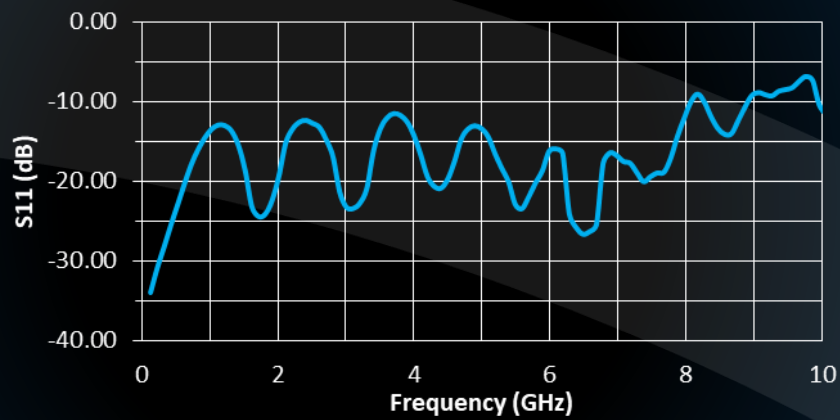


PM-1310-6

TYPICAL S21
RESPONSE



TYPICAL S11
RESPONSE



MECHANICAL
DRAWING

