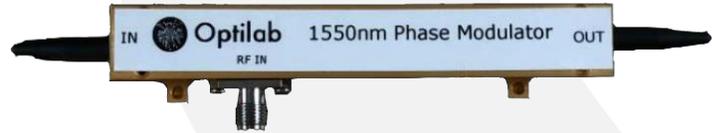


PM-1550-18



DEVICE

18 GHz, 1550 nm Phase Modulator

OVERVIEW

The Optilab PM-1550-18 is a high performance, 18 GHz LiNbO₃ phase modulator. PM-1550-18 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-1550-18 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.

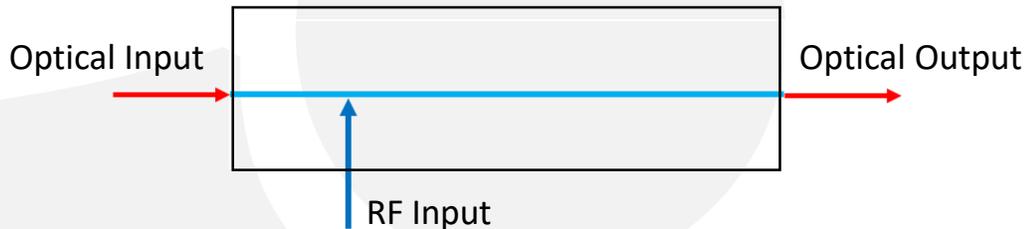
FEATURES

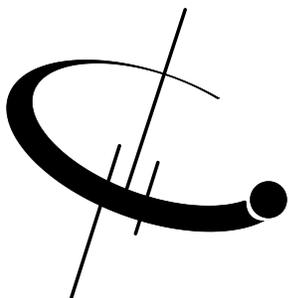
- 1525 nm to 1565 nm
- 18 GHz Bandwidth
- Low Optical Loss
- Minimal Back Reflections
- Polarization Maintaining

USE IN

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

FUNCTION DIAGRAM





PM-1550-18

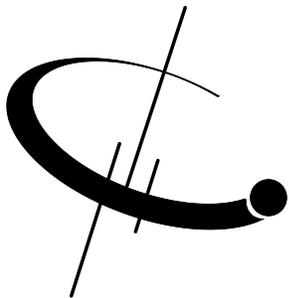
SPECIFICATIONS

Input Optical Power	40 mW max
Operating Wavelength	1525 nm to 1570 nm
Insertion Loss	3.5 dB typical, 4 dB max
Polarization Extinction Ratio	≥ 20dB
Optical Return Loss	≥ 30 dB
S ₂₁ Bandwidth	18 GHz typical @ -3 dB
S ₁₁ Return Loss	≤ -10 dB @ 15 GHz
V _π	9.5 V typ. @ 1 GHz 17.5 V typ. @ 18 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 1550
Output Fiber Type	Panda - PM 1550
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"

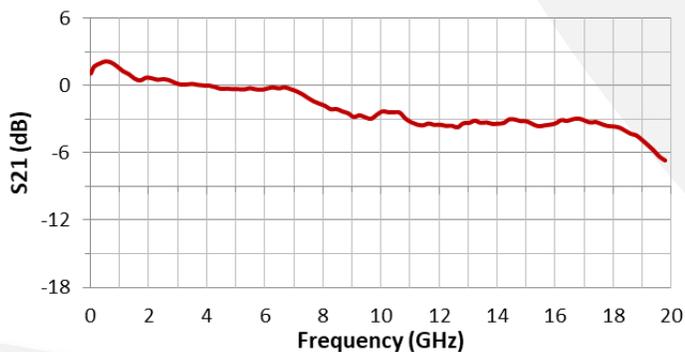




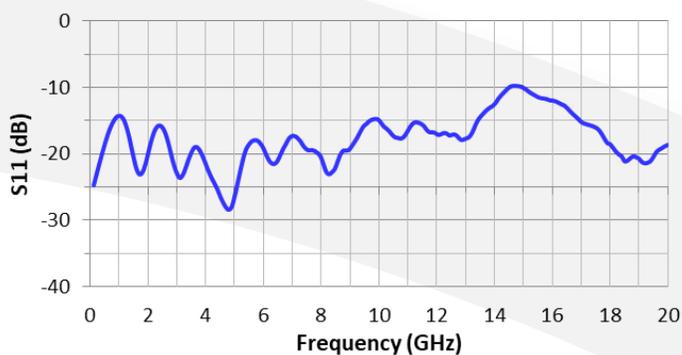
PM-1550-18



TYPICAL S21
RESPONSE



TYPICAL S11
RESPONSE



MECHANICAL
DRAWING

