

DEVICE

850 nm, 500 MHz Phase Modulator

OVERVIEW

The Optilab PM-850-0.5 phase modulator a 500 MHz LiNbO3 modulator. This modulator can provide phase modulation with a low driving voltage. Its low insertion loss provides for its maximum transmission power. The PM-850-0.5 modulator uses polarization maintaining (PM) input and output fibers, making it easy to integrate with other optical components. Contact Optilab for more information.

FEATURES

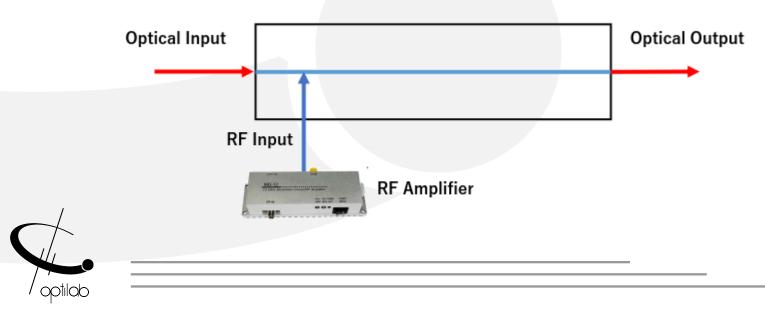
- Up to 500 MHz Bandwidth
- Low Optical Loss
- 850 nm operating wavelength
- Low Drive Voltage
- Minimal Back Reflections
- Polarization Maintaining

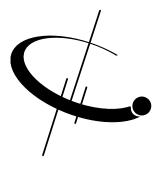
USE IN

- Coherent Communications
- Optical Chirping
- Optical Sensing

- FM Spectroscopy
- Frequency Shifting
- Laser Linewidth Broadening

FUNCTIONAL DIAGRAM





__ PM-850-0.5

SPECIFICATIONS

GENERAL

Input Optical Power	20 mW max.
Operating Wavelength	$850\pm20\mathrm{nm}$
Insertion Loss	3.0 dB typ., 3.5 dB max.
Extinction Ratio	≥ 21 dB min
Optical Return Loss	≤ -30 dB
S21 Bandwidth (RF Port)	300 MHz typ.
Vπ (RF Port)	4 V typ. @ 1 GHz
RF Input Power	+30 dBm max.

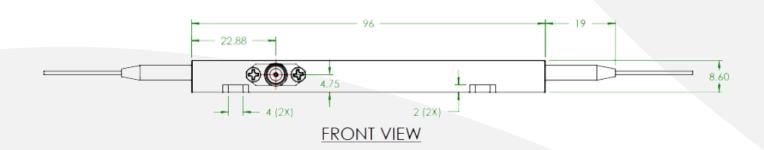
MECHANICAL

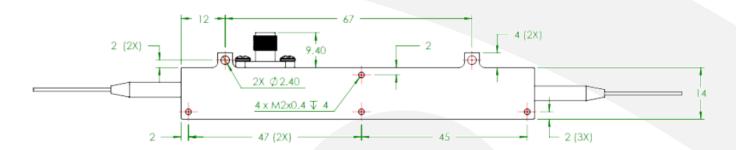
Operating Temperature (Standard)	-55 °C to +75 °C
Storage Temperature	-60 °C to +90 °C
Operating Humidity	0% to 90% Relative Humidity
Input/Output Fiber Type	Panda – PM 850
Input/Output Connector	PM FC/APC, request for others
Material	LiNb03
RF Port Connectors	K Connector
Cabling	900 µm tubing
Dimensions	3.783" x 0.981" x 0.640"





MECHANICAL DRAWING





BOTTOM VIEW

Unit: mm

