

# STOL-PM-1550-0.2-S



## DEVICE

## 1550 nm Phase Modulator, Low Drive, 200 MHz

## OVERVIEW

STOL-PM-1550-0.2-S is a high performance, 200 MHz LiNbO<sub>3</sub> phase modulator. It can provide phase modulation in a broad operation bandwidth with a low driving voltage. Its low insertion loss provides for maximum transmission power. The STOL-PM-1550-0.2-S is fabricated with Annealed Proton Exchange (APE) optical waveguides, and uses polarization maintaining input and output fibers, making it easy to integrate with other optical components. Contact Optilab for more information.

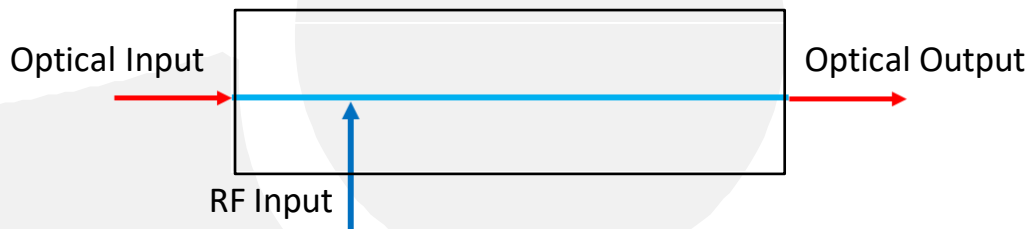
## FEATURES

- 1550 nm +/- 30 nm
- X-cut APE Process
- 200 MHz Bandwidth
- Low Drive Voltage
- Polarization Maintaining
- Low Optical Loss

## USE IN

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

## FUNCTION DIAGRAM



# STOL-PM-1550-0.2-S

## SPECIFICATIONS

### GENERAL

Input Optical Power	100 mW max
Operating Wavelength	1550 nm +/- 30 nm
Insertion Loss	3.0 dB typical, 3.5 dB max
Chip Polarization Extinction Ratio	> 60 dB
Pigtail Polarization Extinction Ratio	≥ 20 dB
Process	Annealed Proton Exchange
Optical Return Loss	≤ -45 dB
S <sub>21</sub> Bandwidth	200 MHz typical @ -3dB
V <sub>π</sub>	2.0V typ., 2.5V max @ 10 kHz
RF Input Voltage	20 V <sub>pp</sub> max
Impedance	High Z

### MECHANICAL

Operating Temperature	-25°C to +75°C
Storage Temperature	-50 °C to +90 °C
Operating Humidity	0% to 90% Relative Humidity
Input Fiber	Panda, PM1550, slow axis aligned to TE Mode
Output Fiber Type	Panda, PM1550, slow axis aligned to TE Mode
Input Connector	PM FC/APC, key aligned to slow axis
Output Connector	PM FC/APC, key aligned to slow axis
RF Port Connectors	SMA Female
Fiber Jacket	900 μm loose tube
Dimension	96mm x 14mm x 8.6mm

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MECHANICAL  
DRAWING

Unit: mm

