

# PM-1064-0.2-ULD



#### **DEVICE**

### 1064 nm Phase Modulator, Ultra Low Drive, 200 MHz

#### OVERVIEW

The Optilab PM-1064-0.2-ULD is a high performance, 200 MHz LiNbO3 phase modulator. It can provide phase modulation in a broad operation bandwidth with a ultra low driving voltage. Its low insertion loss provides for maximum transmission power. The PM-1064-0.2-ULD 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

- 1030 nm to 1070 nm
- X-cut APE Process
- 200 MHz Bandwidth

- Ultra 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







## PM-1064-0.2-ULD

#### **SPECIFICATIONS**

**GENERAL** 

Input Optical Power	80 mW max
Operating Wavelength	1030 nm to 1070 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	100 MHz typical 📵 -3dB, 200 MHz usable
Vπ	1.3V typ. 📵 10 kHz
RF Input Voltage	10 Vpp max
Impedance	High Z

#### **MECHANICAL**

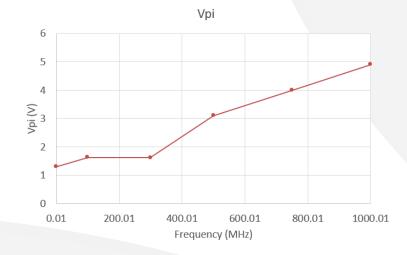
Operating Temperature	-25°C to + 75°C		
Storage Temperature	-50 °C to +90 °C		
Operating Humidity	0% to 90% Relative Humidity		
Input Fiber	Panda, PM98-U40D, slow axis aligned to TE Mode		
Output Fiber Type	Panda, PM98-U40D, slow axis aligned to TE Mode		
Input Connector	PM FC/APC, key aligned to slow axis		
Output Connector	PM FC/APC, key aligned to slow axis		
RF Port Connectors	Pins		
Fiber Coating	400 μm		
Dimension	84.0 mm x 11.5 mm x 5.8 mm		





### PM-1064-0.2-ULD

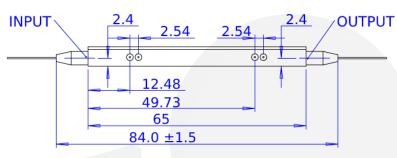
Vpi vs Frequency

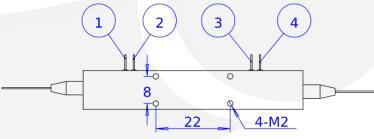




Unit: mm







5.8				
			2.7	
	<u></u>	_	 	
1	11.5		1	
	16.2			

Pin	Description		
1	V-		
2	V+		
3	V+		
4	V-		

