

Fiber Optical Phase Modulator

200 MHz 1550 nm



DATASHEET

BUY NOW



This is a high performance, 200 MHz LiNbO₃ 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. This 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.

Features

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

Applications

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

Specifications

| Parameter | Min | Typical | Max | Unit |
|---------------------------------------|-----|---------|-----|--------------|
| Input Optical Power | | | 100 | mW |
| Operating Wavelength | | 1550 | | nm |
| Insertion Loss | | 3 | 3.5 | dB |
| Chip Polarization Extinction Ratio | 60 | | | dB |
| Pigtail Polarization Extinction Ratio | 20 | | | dB |
| Optical Return Loss | | | -45 | dB |
| S21 Bandwidth | | 200 | | MHz |
| V π @10GHz | | 2.0 | 2.5 | V |
| RF Input Power | | | 20 | Vpp |
| Impedance | | High Z | | Ω |
| Operating Temperature | -25 | | 75 | $^{\circ}$ C |
| Storage Temperature | -50 | | 90 | $^{\circ}$ C |
| Operating Humidity | 0 | | 90 | % |

Legal notices: All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind Agiltron only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with the use of a product or its application.

Rev 09/30/24

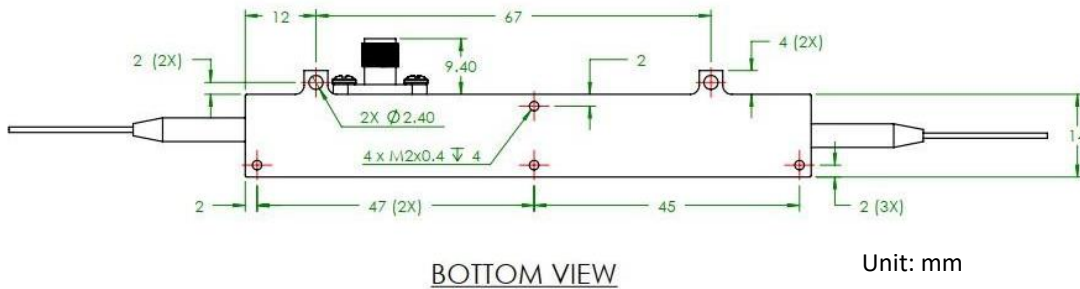
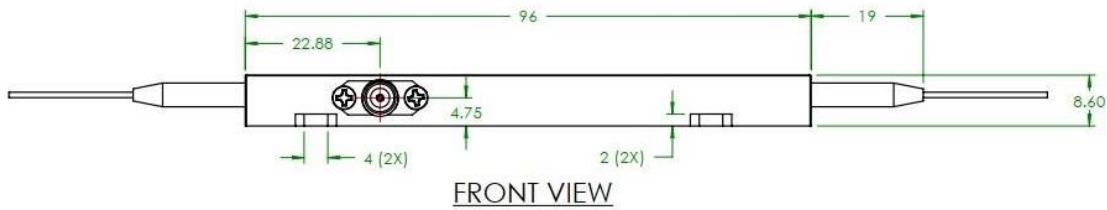
Fiber Optical Phase Modulator

200 MHz 1550 nm



DATASHEET

Dimensions (mm)



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Electrical Connection

| PIN | Symbol | Description |
|-----|---------------|-------------|
| 1 | - | N/A |
| 2 | - | N/A |
| 3 | - | N/A |
| 4 | - | N/A |
| 5 | - | N/A |
| 6 | - | N/A |
| 7 | - | N/A |
| RF | RF connector* | SMA Female |

Ordering Information

| Prefix | Configuration | Wavelength | Frequency | Input Fiber | Output Fiber | Cable | Fiber Length | Connector |
|--------|---------------|------------|------------|-------------|--------------|----------------|-------------------------|--|
| LNPM- | Phase = 2 | 1550nm = 5 | 200MHz = 1 | PM1550 = 5 | PM1550 = 5 | 0.9mm tube = 1 | 0.5m = 1 Special = 0 | FC/APC = 3 FC/PC = 2 Special = 0 |