Fiber Optical Phase Modulator

500MHz, 850 nm

DATASHEET

BUY NOW

The LNPM is a high-performance, fiber-coupled phase modulator with operating frequencies ranging from DC to 200MHz, covering the 1030-1070 wavelength band. It is constructed using optical waveguides on high efficient X-cut $LiNbO_3$ material and is coupled with polarization-maintaining input and output fibers.

Specifications

Parameter	Min	Typical	Max	Unit
Input Optical Power			10	mW
Operating Wavelength	810		850	nm
Insertion Loss*		3.5	4	dB
Polarization Extinction Ratio	18			dB
Optical Return Loss			-55	dB
Operating Frequency	0		500	MHz
Vπ RF @50kHz			3.5	V
Maximum Applying Voltage	-15		+15	V
Operating Frequency	0.01		10	GHz
Additional Intensity Modulation			0.1	%
Operating Temperature	-40		75	° C
Storage Temperature	-55		85	° C
Operating Humidity			95	%

Features

- Low drive voltage
- Low insertion loss
- APE waveguide
- Excellent long-term stability

Applications

- Optical sensor
- Quantum optics
- Frequency shifting
- Hydrophone

Rev 08/22/24

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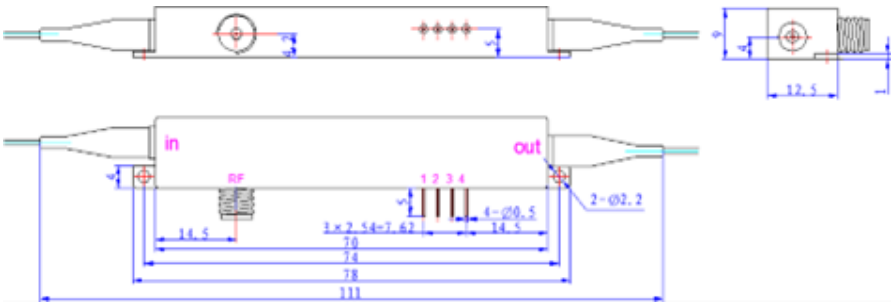
Dimensions (mm)



(LxWxH=111x12.5x9) Unite: 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 or K(2.92mm)

Ordering Information

	2	1	☐	☐	☐	☐	☐	☐	☐
Prefix	**Configuration**		**Wavelength**	**Frequency**	**Input Fiber**	**Output Fiber**	**Cable**	**Fiber Length**	**Fiber Cpnnector**
LNPM-	Phase = 2		850 nm = 8	500MHz = 5	SM800=8 PM850=P	SM800=8 PM850=P	0.125mm= 1 0.9mm=2	0.5m = 1 Special = 0	FC/APC = 3 FC/PC = 2 Special = 0

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