Fiber Optical Phase Modulator 500MHz, 850 nm





DATASHEET





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 LiNbO₃ material and is coupled with polarization-maintaining input and output fibers.

Features

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

Applications

- Optical sensor
- Quantum optics
- Frequency shifting
- Hydrophone

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	%

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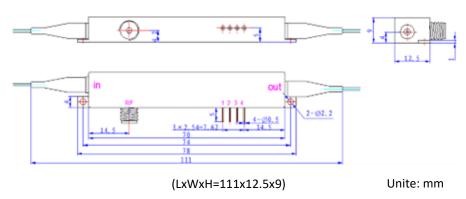
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Dimensions (mm)



^{*}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 or K(2.92mm)			

Ordering Information

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	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