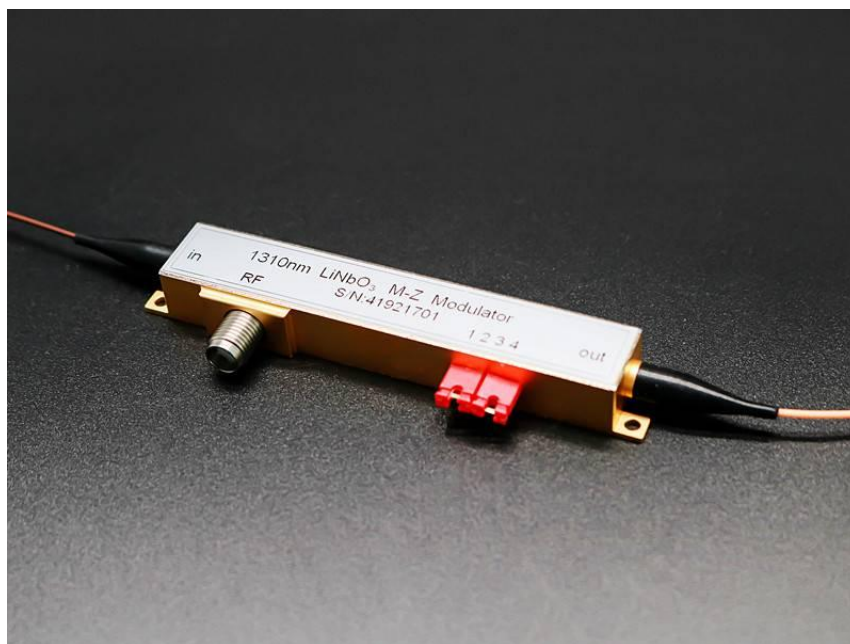


1064nm LiNbO3 High Frequency Phase Modulator 10GHz



● Product Description

1064/1310/1550nm LiNbO3 high frequency phase modulator uses titanium diffusion or proton exchange process to make optical waveguide, the input and output optical fiber and waveguide are precisely obliquely coupled, and the electro-optical effect of lithium niobate material is used to realize the phase modulation of optical signal. Titanium diffusion



(Ti-indiffusion) or proton exchange (APE) waveguide process can obtain double refraction or single polarization phase modulation respectively.

- **Product features**

Low insertion loss 、 Low drive voltage 、 Titanium diffused or proton exchange waveguide、 Excellent long-term stability

- **Part Number**

MP-EOM-PM-1064-10G-FA

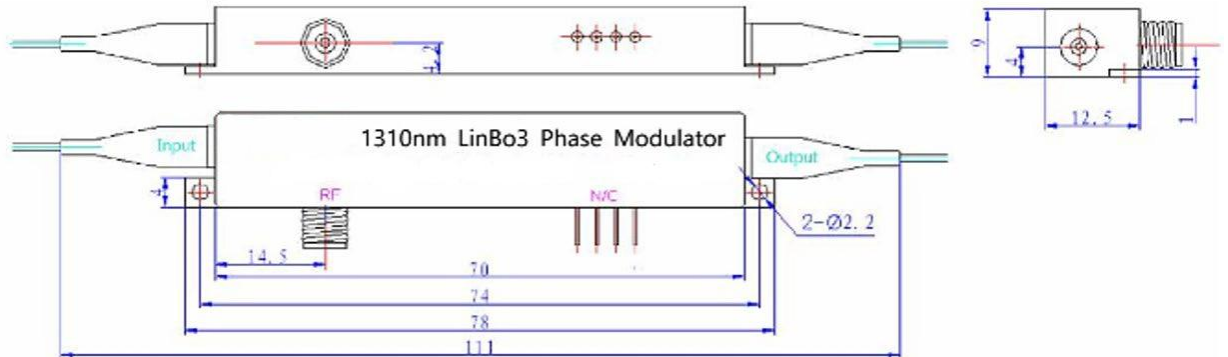
- **Application area**

Fiber optic communications 、 Microwave photons 、 Quantum communications、 Optical sensing、 Optical chirp

- **Core parameters**

Wavelength	Bandwidth	Half-wave Voltage
1064nm	10GHz	3.5V

● Dimension Drawing



● General Parameters

Electrical/optical properties (Tsub=25 °C, CW):

Parameters	Unit	Min.	Typ.	Max.
Model		MP-EOM-PM-1310/1550-10G-PM-FA		
Half-wave voltage DC electrode	V		3.5	4.5
Electro-optical bandwidth S21@-3dB	GHz	10		20
RF half-wave voltage @DC	V		3.5	4.0
Bias half-wave voltage	V			5.0
Jitter	dB		0.5	1
Electrical return loss S11@-20GHz	dB		-12	-10



RF connector input resistance	Ω		40	
Input impedance DC connector	Ω		> 1 M	
Crystal: Lithium Niobate	.	X-cutY-propagation		
Waveguide process		APE Technology		
Insertion loss	dB		3.0	4.0
Optical return loss	dB		<-45	
Wavelength-dependent loss (1480-1600nm)	dB		0.5	1.0
DC extinction ratio	dB	20	22	
Input fiber		Panda PM FIBER1.5m length, 900um		
Output fiber		SMF-28SMFiber1.5length, 900um(PMF Optional)		
Input RF connector		SMA		
DC connector		Pinfeed-through diameter: 1.0mm		
Package size	mm	110x12.5x9.0		
Operating temperature	$^{\circ}\text{C}$	0~+70		
Storage temperature	$^{\circ}\text{C}$	-40~+85		
DC input maximum voltage	V	± 20		



Maximum RF input power	dBm	+28
Maximum input optical power	mW	200(APE Technology)

Order Info:

MP-PM-W-BW-Y-Z-AB-CD

PM:PhaseModulator

W_Wavelength:

0850:850nm

1064:1064nm

1310:1310nm

1550:1550nm

BW: Bandwidth

0.3G>300MHz

10G>10GHz

Y:Input Fiber

P:PM Fiber

S:SM Fiber

Z: Output Fiber

P:PM Fiber



SSM Fiber

AB: Input fiber connector

00:bare Fiber FAFC/ APC

FCFC/ SPC

CD: Output fiber connector

00bare fiber

FA:FC/ APC

FC:FC/ SPC