# Rof-AM 1064nm Intensity Modulator

Rof-AM series 1064nm lithium niobate electro-optic intensity modulator adopts advanced proton exchange technology. It has the characteristics of low insertion loss, high modulation bandwidth, low half-wave voltage and so on，and mainly used in space optical communication system, cesium atomic time reference, pulse generator, quantum optics and other fields.

- Low insertion loss
- High damage power
- Low half-wave voltage
- High stability
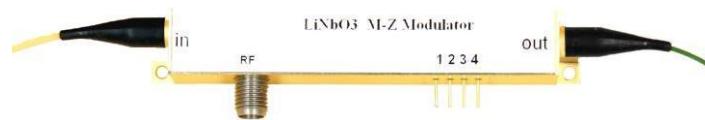
Applications

- Fiber optic sensing system
- Pulsed light modulation system

Features

- Pulse light generator
- Analog transmission link

Performance parameter

Parameter		Symbol	Min	Typ	Max	Unit
Optical parameters						
Operating wavelength		λ	980	1060	1150	nm
Insertion loss		IL	-	4	5	dB
Optical return loss		ORL	-40	-45	-	dB
Switch extinction ratio@DC		ER@DC	20	23	-	dB
Dynamic extinction ratio		DER	12	13		dB
Optical fiber	Input port		PM fiber 980 nm			
	output port		PM fiber 980 nm			
Optical fiber interface			FC/PC、FC/APC Or user to specify			
Electrical parameters						
Operating bandwidth（-3dB）		S_{21}	300			MHz
Half-wave	RF	$V\pi$		3	3.5	V
	Electrical return loss	S_{11}		-12	-10	dB
Input impedance	RF	Z_{RF}	50			Ω
	Bias	Z_{BIAS}	1M			Ω
	Electrical interface		SMA			
	Bias pin definition		1,2-Bias 3,4- N/C			

Limit Conditions

Parameter	Symbol	Unit	Min	Typ	Max
Input optical power	$P_{in,Max}$	dBm			20
Input RF power		dBm			28
Bias voltage	Vbias	V	-20		20
Operating temperature	Top	ºC	0		70
Storage temperature	Tst	ºC	-40		85
Humidity	RH	%	5		90

Characteristic curve
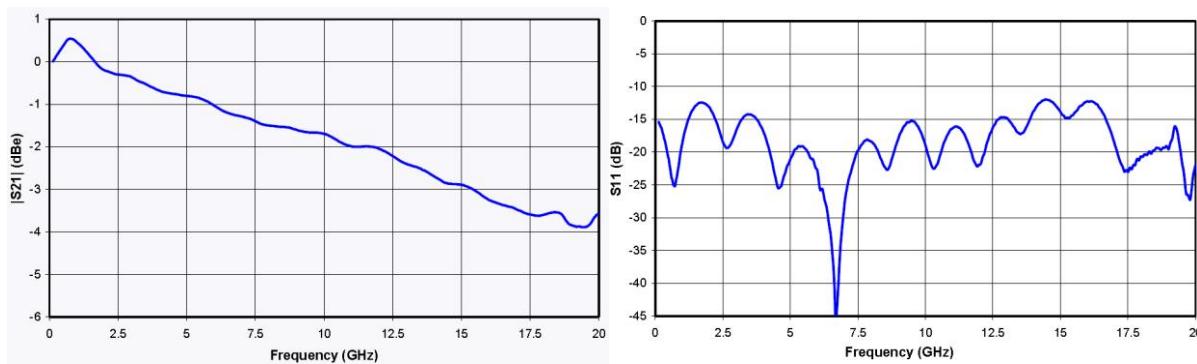
S_{11}&S_{21}Curve

Mechanical Diagram(mm)
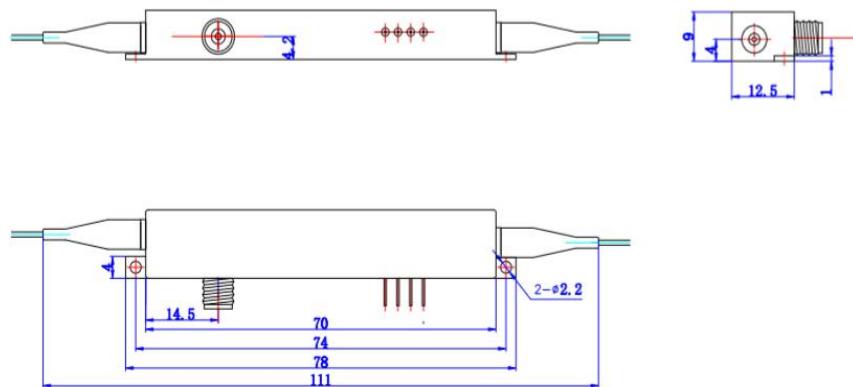
Order information

Rof	AM	10	XX	XX	XX
	Modulator type: AM---Intensity modulator	Working wavelength: 10---1064nm	Operating bandwidth: 300M---DC-300MHz 2.5G---2.5GHz 10G---10GHz	Optical fiber: PP---PM/PM	Facet: FA---FC/APC FP---FC/PC SP---User's customization

*please contact our sales if you have special requirements.