



# R-AM 1064nm Intensity Modulator

R-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.

## Features

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



## Applications

- Fiber optic sensing system
- Pulsed light modulation system
- Pulse light generator
- Analog transmission link

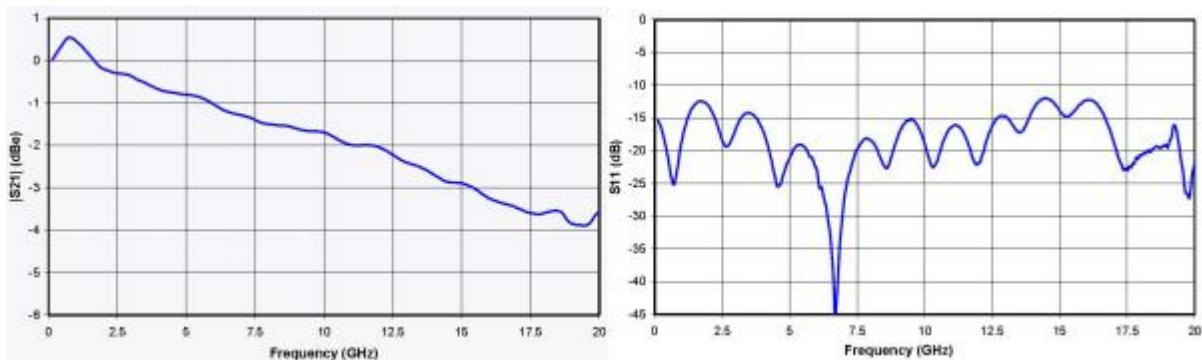
## Performance parameter

Parameter	Symbol	Min	Typ	Max	Unit
<b>Optical parameters</b>					
Operating wavelength	$\lambda$	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		
<b>Electrical parameters</b>					
Operating bandwidth (-3dB)	$S_{21}$	0.01~2.5 、 0.01~10			GHz
Bandwidth fluctuation	$\Delta S_{21}$		0.5	1	dB
Half-wave	RF	$V\pi@50KHz$	3	3.5	V
	Bias	$V\pi@Bias$	3.5	4	V
Electrical return loss	$S_{11}$		-12	-10	dB
Input impedance	RF	$Z_{RF}$	50		$\Omega$
	Bias	$Z_{BIAS}$	1M		$\Omega$
Electrical interface			SMA		
Bias pin definition			1,2-Bias 3,4- N/C		

## Limit Conditions

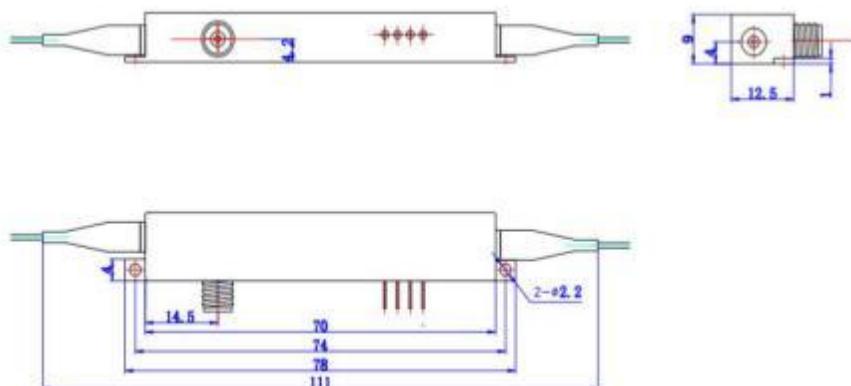
Parameter	Symbol	Unit	Min	Typ	Max
Input optical power	$P_{in, Max}$	dBm			20
Input RF power		dBm			28
Bias voltage	Vbias	V	-20		20
Operating temperature	Top	°C	0		70
Storage temperature	Tst	°C	-40		85
Humidity	RH	%	5		90

### Characteristic curve



S<sub>11</sub>&S<sub>21</sub>Curve

### Mechanical Diagram( mm)



### Order information

R	AM	10	XX	XX	XX
	Modulator type: AM---Intensity modulator	Working wavelength: 10--- 1064nm	Operating bandwidth: 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.

