

# ROF-AM-HER



## High extinction ratio modulator

www.rof.com

ROF-AM-HER series high extinction ratio of electro-optic modulator based on M - Z push-pull structure intensity, has a lower half wave voltage and stable physical and chemical characteristics, using special technology to ensure the device with high extinction ratio of DC, and the device has high response speed, and therefore is widely used in light pulse generator, optical fiber sensing, laser radar, and other fields.

### Features

- The extinction ratio is greater than 40dB
- Low insertion loss
- High modulation bandwidth
- Low half wave voltage

### Applications

- Optical pulse generator
- Brillouin sensing system
- Laser radar

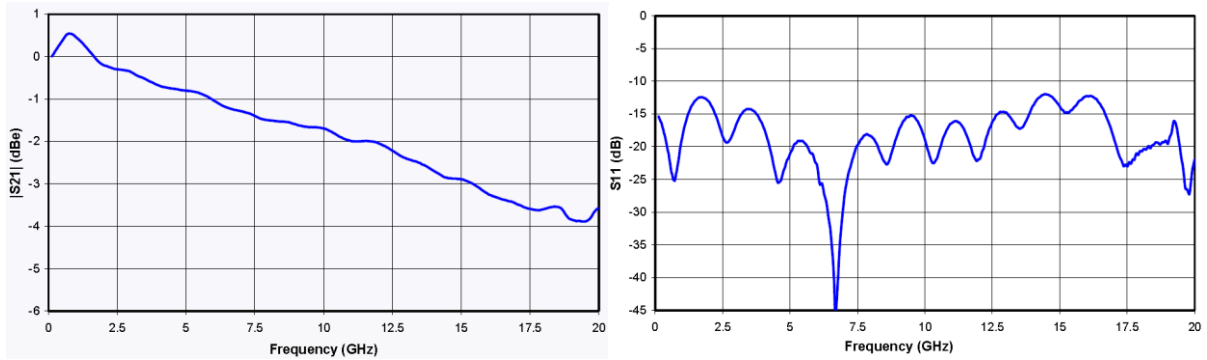
### Performance

Parameter	Symbol	Min	Typ	Max	Unit
<b>Optical parameters</b>					
Operating wavelength	$\lambda$	1525		1565	nm
Insertion loss	IL		4	5	dB
Optical return loss	ORL			-45	dB
Switch extinction ratio@DC	ER@DC	35	40	50	dB
Dynamic extinction ratio		Panda PM			
Optical fiber	Input port	Panda PM or SMF-28			
Fiber interface		FC/PC、FC/APC Or user to specify			
<b>Electrical parameters</b>					
Operating bandwidth (-3dB)	$S_{21}$	10	12		GHz
Half-wave	RF	$V_{\pi@50KHz}$		5	V
	Bias	$V_{\pi@Bias}$		7	V
Electrical return loss	$S_{11}$		-12	-10	dB
Input impedance	RF	$Z_{RF}$		50	$\Omega$
	Bias	$Z_{BIAS}$	10000		$\Omega$
Operating bandwidth (-3dB)		SMA(f)			

### Limit Conditions

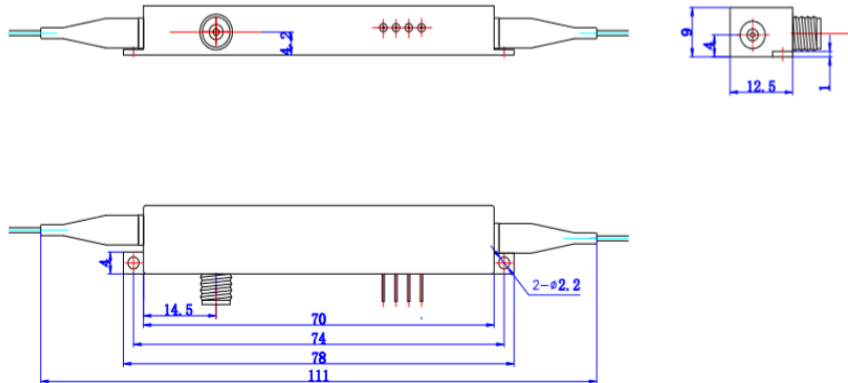
Parameter	Symbol	Min	Typ	Max	Parameter
Input optical power	$P_{in,Max}$	dBm			20
Input RF power		dBm			28
Bias voltage	Vbias	V	-20		20
Operating temperature	Top	°C	-10		60
Storage temperature	Tst	°C	-40		85
Humidity	RH	%	5		90

### Characteristic



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

### Mechanical Diagram(mm)



### Order information

ROF	AM	HER	XX	XX	XX	XX
	Intensity modulator	High extinction ratio	Wavelength: 15---1550nm	Bandwidth: 2.5---2.5GHz 10G---10GHz 20G---18GHz	Optical fiber: PP---PMF-PMF PS---PMF-SMF	Facet: FA---FC/APC FP---FC/PC SP---User's customization

\*please contact our sales if you have special requirements.