



# ROF-PM-UV

## Low-V<sub>pi</sub> phase modulator

ROF-PM-UV series Low-V<sub>pi</sub> phase modulator has low half-wave voltage ( 2.5 V ) , low insertion loss, high bandwidth, high damage characteristics of optical power, chirp in high-speed optical communication system is mainly used for light control, phase shift of coherent communication system, sideband ROF system and reduce the simulation of optical fiber communication system in Brisbane deep stimulated scattering (SBS), etc.

### Features

- High endurance light power
- Low half-wave voltage~2.5V
- Low insertion loss
- High modulating bandwidth



### Applications

- Optical fiber sensing
- Optical fiber communication, laser coherent synthesis
- Phase delay (shifter)
- Quantum communication
- ROF system

### Performance parameter

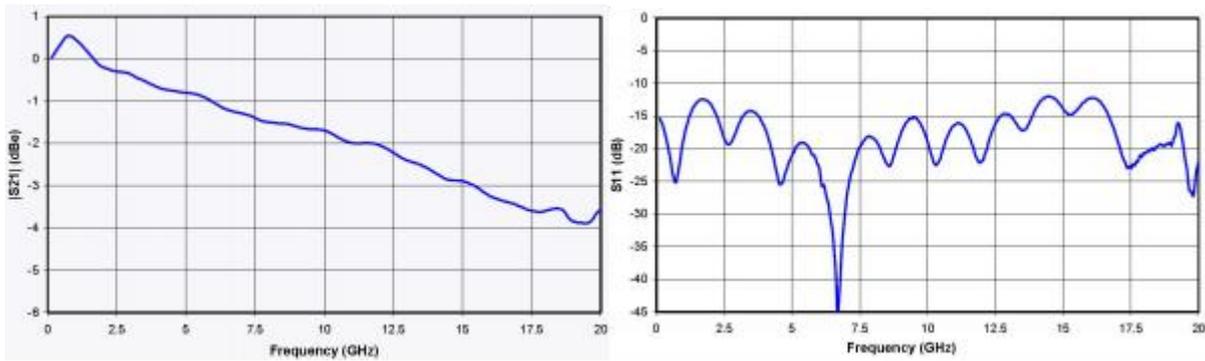
Parameter	Symbol	Min	Typ	Max	Unit	
<b>Optical parameters</b>						
Operating wavelength	$\lambda$	1525		1565	nm	
Insertion loss	IL		3	3.5	dB	
Optical return loss	ORL			-45	dB	
Optical fiber	Input port		Panda PM			
	output port		Panda PM			
Optical fiber interface		FC/PC 、 FC/APC Or user to specify				
<b>Electrical parameters</b>						
Operating bandwidth (-3dB)	S <sub>21</sub>	10	12		GHz	
RF Half-wave voltage (Each electrode )	@50KHz	V <sub>π</sub>	2.4	2.5	2.6	V
	@ 10GHz	V <sub>π</sub>	3.4V		3.7	V
Electrical return loss	S <sub>11</sub>		-12	-10	dB	
RF Input impedance	Z <sub>RF</sub>	50			Ω	
Electrical interface		SMA(f)				



**Limit Conditions**

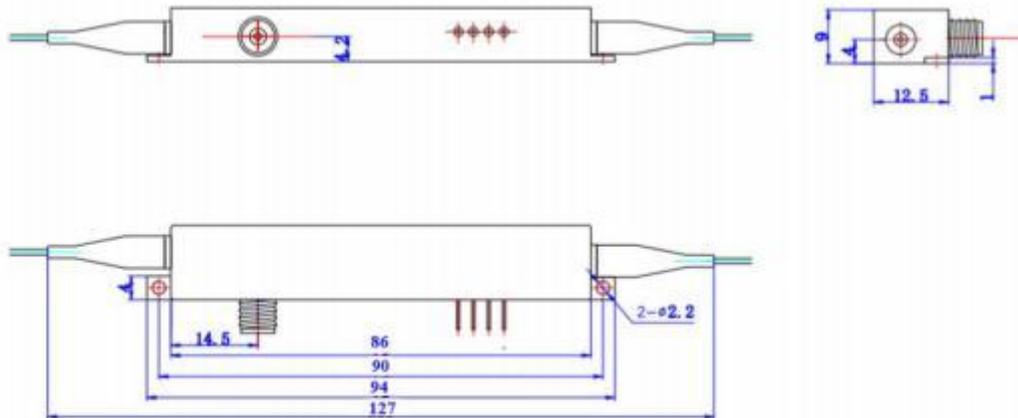
Parameter	Symbol	Min	Typ	Max	Unit
Input optical power	$P_{in,Max}$	dBm			20
Input RF power		dBm			28
Operating temperature	$T_{op}$	°C	-10		60
Storage temperature	$T_{st}$	°C	-40		85
Humidity	RH	%	5		90

**Characteristic curve**



S11&S21 Curve

**Mechanical Diagram(mm)**



**Order information**

ROF	PM-UV	15	10G	XX	XX
	Modulator type: PM---Phase modulator UV---Low-Vpi	Working wavelength: 15--- 1550nm	Operating bandwidth: 10G--- 10GHz	Optical fiber: PS---PM/SMF PP---PM/PMF	Facet: FA---FC/APC FP---FC/PC SP---用户指定

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