

R-PM-15 Series

1550nm Phase Modulator

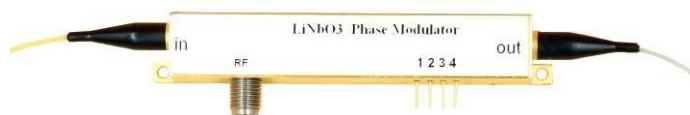
Lithium niobate electro-optical phase modulator based on titanium diffusion process has the characteristics of low insertion loss, high modulation bandwidth, low half wave voltage, high damage optical power, etc. It is mainly used in the fields of optical chirp control in high-speed optical communication systems, phase shift in coherent communication systems, generation of sidebands in ROF systems, and reduction of stimulated Brillouin scattering (SBS) in analog optical fiber communication systems.

Features

- Bandwidth ~20GHz
- Low half-wave voltage
- High damage optical power
- Low insertion loss

Application

- Optical fiber sensing
- Optical fiber communication
- Laser coherent synthesis
- Phase delay (direction shifter)
- Quantum communication
- ROF system



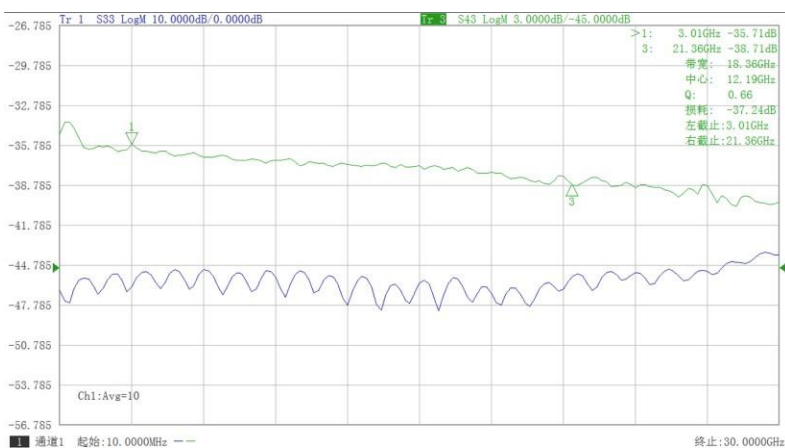
Performance

Parameter	Symbol	Min	Typ	Max	Unit
Optical parameters					
Optical parameters	λ	1520		1570	nm
Optical parameters	IL	3	3.5	4	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 Customization			
Electrical parameters					
Operating bandwidth (-3dB)	R-PM-15-20G	S_{21}	18	20	GHz
V_{π} @ 50KHz	R-PM-15-20G	V_{π}	3	4	V
Electrical return loss		S_{11}	-12	-10	dB
Input impedance	R-PM-15-20G	Z_{RF}	50		Ω
Electrical interface	R-PM-15-20G		K(f)		

Limit Conditions

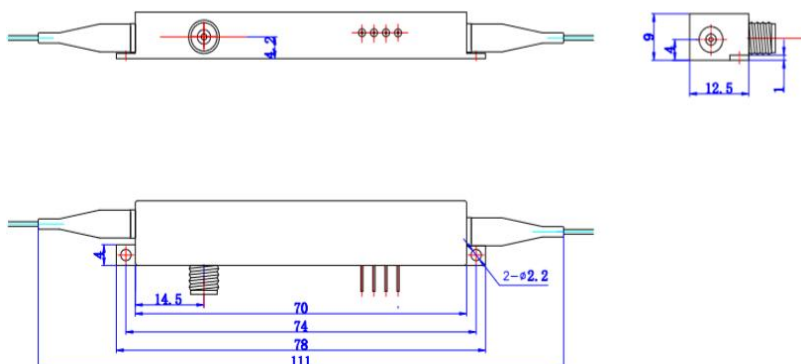
Parameter	Symbol	Min	Typ	Max	Unit
Input optical power @1550nm	$P_{in,Max}$	dBm			17
Input RF power		dBm			27
Operating temperature	T_{op}	°C	-10		60
Storage temperature	T_{st}	°C	-40		85
Humidity	RH	%	5		90

Curves



S_{11} & S_{21} curves

Package (mm)



R-PM-15-20G



Ordering

R	PM	W	B	F	C
	Modulator Type: PM---Phase modulator	Wavelength: 15---1550nm	Bandwidth: 20G---20GHz	Fiber: PP---PM/PMF	Connector: FA---FC/APC FP---FC/PC SP--- User specified

* If you have special requirements, please contact our sales staff