

Dual phase modulators

Dual phase modulator can realize optical signal phase in two levels of continuous modulation, high integration, low insertion loss, high bandwidth, low half-wave voltage, high damage characteristics of optical power, chirp in high-speed optical communication system is mainly used for light control, entanglement in the quantum key distribution system, sideband ROF system and reduce the simulation of optical fiber communication system in Brisbane deep stimulated scattering (SBS), etc.

Features

- High modulating bandwidth
- Low half-wave voltage
- High damage light power
- Low insertion loss



Applications

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

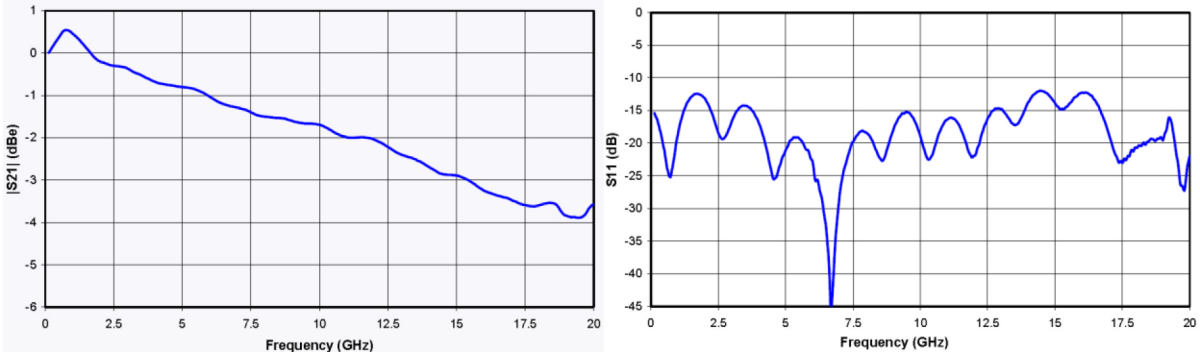
Performance parameter

Parameter		Symbol	Min	Typ	Max	Unit
Optical parameters						
Operating wavelength		λ	1525		1565	nm
Insertion loss		IL		3.8	4.5	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			
Electrical parameters						
Operating bandwidth（-3dB）		S ₂₁		8	10	GHz
RF Half-wave voltage（Each electrode）	@50KHz	V π		5	5.5	V
	@10GHz	V π		7.5	8.5	V
Electrical return loss		S ₁₁		-12	-10	dB
RF Input impedance		Z _{RF}	50			Ω
Electrical interface			SMA(f)			

Limit Conditions

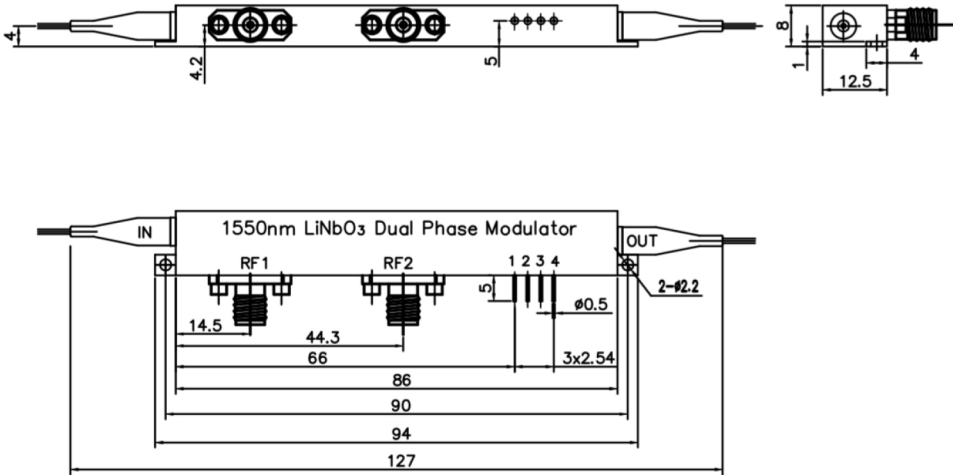
Parameter	Symbol	Min	Typ	Max	Unit
Input optical power	$P_{in,Max}$	dBm			20
Input RF power		dBm			28
Operating temperature	T_{op}	°C	-10		60
Storage temperature	T_{st}	°C	-40		85
Humidity	RH	%	5		90

Characteristic curve



S₁₁&S₂ Curve

Mechanical Diagram(mm)



Order information

ROF	DPM	15	10G	XX	XX
	Modulator type: DPM---Dual phase modulator	Working wavelength: 15---1550nm	Operating bandwidth: 6G---6GHz 10G---10GHz	Optical fiber: PS---PM/SMF PP---PM/PMF	Facet: FA---FC/APC FP---FC/PC SP---User's customization