

ROF-DMZM



Bipolar intensity modulator

www.rof-oc.com

ROF-DMZM Series two-stage intensity modulators adopt a highly integrated cascaded M-Z structure to realize two-stage intensity modulation and obtain a switching extinction ratio greater than 50dB. At the same time, they have the characteristics of low insertion loss, high modulation bandwidth, and intense half-wave voltage. They are mainly used in space optical communication systems, pulse generators, quantum optics, and other fields.

Feature

- High extinction ratio: ~ 50dB
- Bipolar continuous modulation

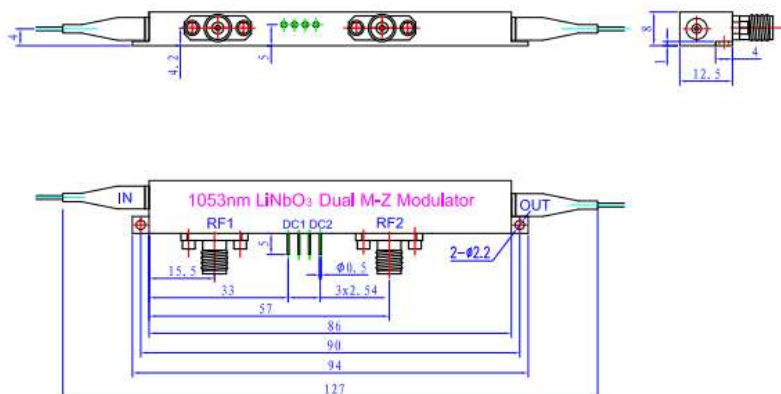
parameters

parameters		sym	min	typ	max	unit
Optical parameters						
Working wavelength		λ	1064±20			nm
Insert loss		IL	-	6	8	dB
Optical return loss		ORL	-40	-45	-	dB
Switch extinction ratio @DC		ER@DC	48	50	-	dB
Optical fiber	Input		PM fiber 980 nm			
	Output		PM fiber 980 nm			
Optical fiber interface			FC/PC、FC/APC or customized			
Electrical parameters						
Working bandwidth（-3dB）		S ₂₁		6	-	GHz
Bandwidth fluctuation		ΔS ₂₁	-	0.5	1	dB
Half-wave voltage V _{pi}	RF	Vπ@50kHz	-	4.5	5	V
	Bias	Vπ@Bias	-	4.5	5	V
Electrical return loss		S ₁₁	-	-12	-10	dB
Input impedance	RF	Z _{RF}	50			Ω
	Bias	Z _{BIAS}	1 M			Ω
Electrical interface			SMA(f)			

Limit condition

parameters	sym	unit	min	typ	max
Optical power input	$P_{in,Max}$	dBm			13
RF terminal power input		dBm			28
Bias terminal bias voltage	V _{bias}	V	-20		20
Work temperature	T _{op}	°C	0		70
Store temperature	T _{st}	°C	-40		85
humidity	RH	%	5		90

Package size (mm)



information

ROF	AM-UHER	W	B	F	C
	Bipolar continuous modulation	wavelength: 10---1064nm	3dB bandwidth: 6G---6GHz	Input/output fiber: PP---PMF/PMF	Optical fiber interface: FA---FC/APC FP---FC/PC SP---customized

*please contact our sales if you have special requirement.