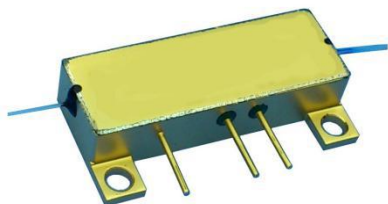




R-MIOC Series Y-Waveguide Modulator



Description

The R-MIOC Series Y-Waveguide Modulator is a LiNbO₃ multifunctional integrated optical circuit (LiNbO₃ MIOC) based on microelectronic technology, which can achieve polarizer and analyzer, beam splitting and combining, phase modulation and other function. The waveguides and electrodes are fabricated on LiNbO₃ chip, the output and input fibers are precisely coupled with the waveguides, then the whole chip is encapsulated in a gold-plated Kovar housing to obtain well performance and high reliability.

Features

- X-cut, low insertion loss
- APE waveguide, high polarization extinction ratio
- Push-pull electrode, low half-wave voltage
- Well long-term stability and small package size

Applications

- Fiber optical gyroscope (FOG)
- Fiber Optic Current Sensor (FOCS)
- Hydrophones and other optical fiber sensing fields

Parameter	Symbol	Numerical value		Unit
Operating wavelength	λ	1310 \pm 25	1550 \pm 25	nm
Insertion loss	IL	≤ 3.5		dB
Beam splitting ratio	--	48/52~52/48		dB
Maximum input optical power	P _{max}	≤ 200		mW
Polarized crosstalk	--	≤ -30		dB
Polarization extinction ratio	PER	≥ 60		dB
Backward light reflection	--	≤ -50		dB
Additional intensity modulation	--	$\leq 0.2\%$		dB
Optical fiber type	--	PM or SM		--
Diameter of pigtail fiber	--	80/170 or 125/250		μm



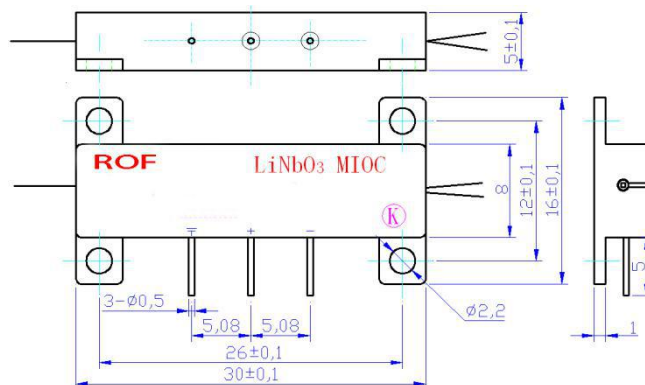
Electrical parameters

Parameter	Symbol	Min	Typ	Max	Unit
Half-wave voltage	V_{Π}		≤ 4.0		V
Working frequency	f		0-300		MHz
Voltage withstanding range of electrodes	Z_{RF}		≤ 15		V
Electrical interface		3 PIN			

Limit Condition

Parameter	Symbol	Unit	Numerical value
Operating temperature	Top	°C	-45 ~ +70
Storage temperature	Tst	°C	-55 ~ +85
Humidity	RH	%	5

Mechanical Diagram



Ordering information

R	MIOC	XX	XX	XX
	Multifunctional integrated optical device	Wavelength: 13---1310nm 15---1550nm	In-Out Fiber type: PP---PM/PM PS---PM/SM	Optical connector: FA---FC/APC FP---FC/PC XX---Customization

More information is provided on website (www.rof-oc.com), you can also contact us for more information by email (sales@rof-oc.com).