

LiNbO3 Low frequencies to 20GHz Phase Modulators

KGMPZ-LN



Features

- High stability
- Extended electro-optic bandwidth up to 40 GHz
- Broad wavelength range: works in C & L bands

Options

- Choice of input and output fibers
- 1300 nm, 1000 nm and 800 nm band versions
- Single guided polarization version
- CMD model with integrated RF driver

Applications

- Chirping
- Interferometric sensing equipment
- Spectrum broadening and frequency shifting
- Quantum key distribution
- High data rate optical Telecommunications

Related Equipments

- Optimized external RF drivers: KGDR-GA series

Specifications KGMPZ

Electrical		Min	Typ	Max
electro-optic bandwidth S21 @-3 dB	GHz	18	20	
V_{π} @ 50kHz	V		7	8
V_{π} @ 32 GHz *	V		10	11
electrical return loss S11 0- cut-off bandwidth	dB		-12	-10
ripple	dB		0.5	1
input resistance RF connector	Ω		40	

Optical

Crystal	Lithium Niobate z-cut, y-propagating			
Waveguide process	Titanium diffusion			
Insertion loss (z axis)	dB		2.5	3.5
Polarization dependant loss	dB		1	1.5
Optical return loss	dB	-45	-50	

Interfaces

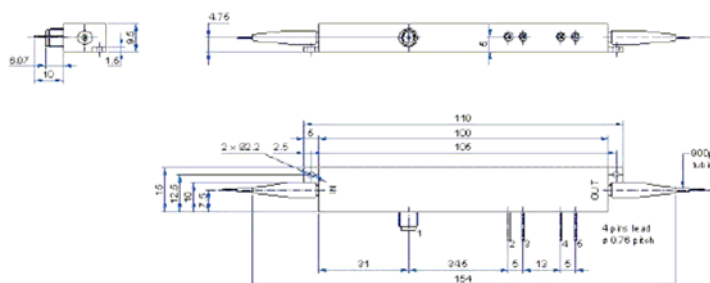
Input and output fibers	polarization maintaining 1550 nm , Panda type, length : 1.5 meter, buffer diameter : 900 _m
Output fiber (option)	single mode type SMF 28 length : 1.5 meter, buffer diameter : 900 _m
Package size	100 x 15 x 9.5 mm
Input RF connector	Wiltron Female SMA type

Environmental

Operating temperature	10°C to +50°C
Storage temperature	-40°C to +85°C

* V_{π} (halfwave voltage) refers to the z axis polarization

Package footprint



dimensions in mm

1 RF INPUT
2 NOT CONNECTED
3 NOT CONNECTED
4 NOT CONNECTED
5 NOT CONNECTED