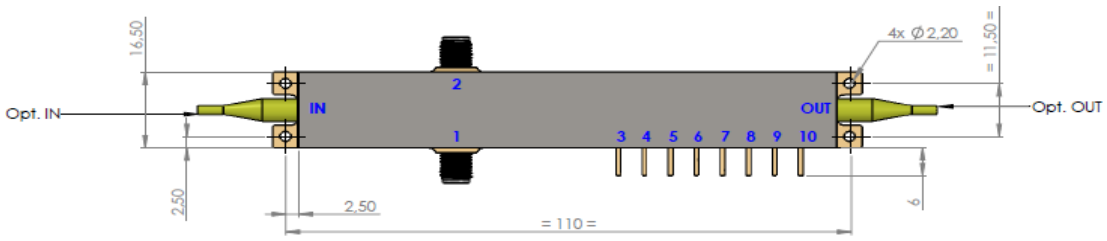
00123400

Acceptance test report

Component	**MXIQ-LN-30-PD-P-P-FA-FA**
Serial number	**14769-03**

Packaging-interfaces		
Input fiber	Polarization maintaining, Panda type	
Output fiber	Polarization maintaining, Panda type	
Jacket type	900µm outside diameter	
Input optical connector (orientation)	FC/APC	Key // slow axis
Output optical connector (orientation)	FC/APC	Key // slow axis
Input fiber length	1.5 meter	
Output fiber length	1.5 meter	
Input RF port	50Ω, female K	

Product dimension and pin-out



Thickness : 9.6mm

Package dimensions in mm

Material : KOVAR

Measured with : 3Sphotonics DFB 1905LMI model λ= 1550 nm

Parameters	Conditions		Measurements		Specifications
Insertion Loss	with input connection	dB	4,7		≤7.25
Internal photodiode responsivity	Reference : input power	A/W	0,003	0,004	
Vπ RF1 & RF2 Port	@50kHz	V	5,1	5,2	≤6
Vπ DC1 & DC2 Port	@100Hz	V	6,5	6,4	≤7
Vπ DC3 Port	@100Hz	V	9,4		≤10.5
Electrical return loss S11	between 0.04 – 20GHz	dB	-10,0	-12,6	≤-10
Electro-optic bandwidth S21	@ -3dB, from 2GHz	GHz	>20	>20	>20

Position	Name/Visa	Date
Test engineer	A.POTHIER	2024-01-12

Precautions of use :

For bias control and modulation signal, please refer to the Application Note **"LiNbO3 Intensity Modulators Bias Control and Modulation Driving"**. This application note aims to give intensity modulators users the basics to select and apply the proper RF and bias voltages to their device and can be downloaded from our company website www.photonics.ixblue.com

In order to avoid any damage to the modulator and to keep its performance at maximum, please pay a special attention to the following :

• When handling the modulator, do not apply any excessive tensile strength neither bend on the fiber pigtails.

•• Always keep the optical connectors end face protected and clean the optical connector end face with appropriate tissue before

••• Clean RF connector with dry air before mating and use a torque wrench for tightening.

•••• Respect maximum ratings mentioned in accordance with specifications (www.photonics.ixblue.com)

••••• At the maximum optical power, fusion splices are expressly recommended to avoid permanent damage on optical connectors.

•••••• In the case of optical instabilities, when operating at high optical power or shorter wavelength, it might be necessary to heat up the modulator (max 50°C)

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