

DESCRIPTION

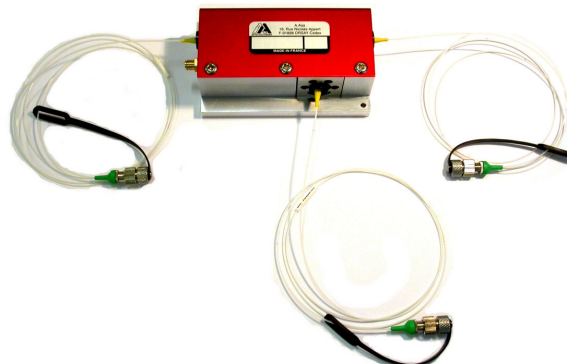
This fiber pigtailed modulator is dedicated to IR lasers such as **1030, 1053, 1064 and 1080 nm**.

FEATURES

- 0th and 1st orders fiber pigtailed
- Polarization Maintaining or Single Mode fiber
- FC/APC or Super FC/PC connector
- High extinction ratio

APPLICATIONS

- Fast optical shutter
- Frequency shifter @ 110 MHz +/- 6 MHz
- Pulse Picking
- Q-switch (fiber laser)



Parameter	Unit	Rating	Conditions
Material-Acoustic mode-Velocity		TeO ₂ - [L] - 4200 m/s	
Optical Wavelength range	nm	Single wavelength in [1000..1100]	
Input / Output Polarization		Random / Random with SM fiber Linear / Linear with PM fiber	
Polarization Dependence Losses	dB	< 0.5	
AO Light Frequency shift	MHz	« +1 » order : + 110	
Total Insertion Losses	dB	Order 1 : < 3 Nom 2.5 Order 0 : < 2.5 Nom 2	Including transmission through the crystal, diffraction efficiency and coupling losses
Extinction Ratio	dB	Order 1 : > 45 Nom 50 Order 0 : > 10	
Rise / Fall time	ns	≤ 25	
Fiber type		Single Mode HI 1060 Or Polarization Maintaining PM980	Input / Output
Fiber connector		FC/APC	
Fiber jacket		900 μm Hytrel tubing	
Pigtail length	m	1	
Max Input Laser power	W	0.5 or 5	CW
Input impedance	Ω	Nom 50	
V.S.W.R.		Nom < 1.2/1	
RF Power / Connector	W	≤ 2 / SMA	
Size / Weight	mm ³	(LxIxh) 100 x 65 x 39 mm ³ / 300 g	IN PRO 137
Operating Temperature	°C	+10 to +40	Non condensing
Storage Temperature	°C	-40 to +50	Non condensing

Options / On request

FIBER JACKET	<input checked="" type="checkbox"/> PVC 3 mm	<input checked="" type="checkbox"/> Stainless steel 3 mm
FIBER CONNECTOR	<input checked="" type="checkbox"/> Super FC/PC	<input checked="" type="checkbox"/> SMA
PIGTAIL LENGTH	<input checked="" type="checkbox"/> 2 m	<input checked="" type="checkbox"/> Other
FREQUENCY SHIFT	<input checked="" type="checkbox"/> « - » 110 MHz	

HOW TO DETERMINE THE REFERENCE OF YOUR MODEL:

MT110-IR25-3FIO-SM0.5-J1-A-s(-)

FIBER TYPE

- **SM** Single Mode
- **PM** Polarization Maintaining

MAX LASER INPUT POWER CW

- **0.5** 500 mW
- **5** 5 W

FIBER JACKET

- **J1** 900 μ m Hytrel tubing
- **J3V** 3 mm PVC
- **J3S** 3 mm stainless steel

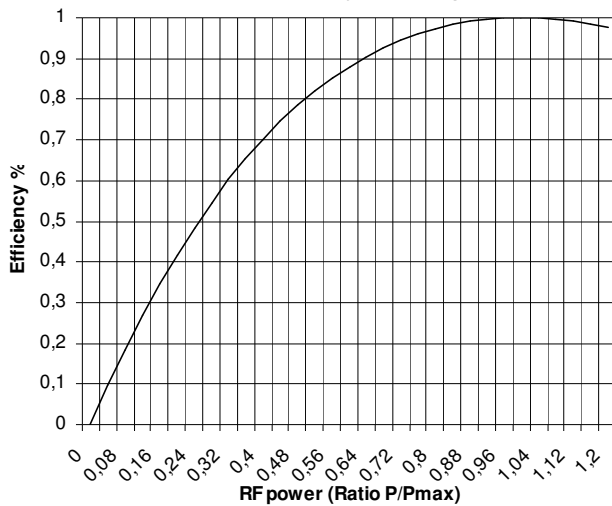
FREQUENCY SHIFT

- **s(-)** Negative

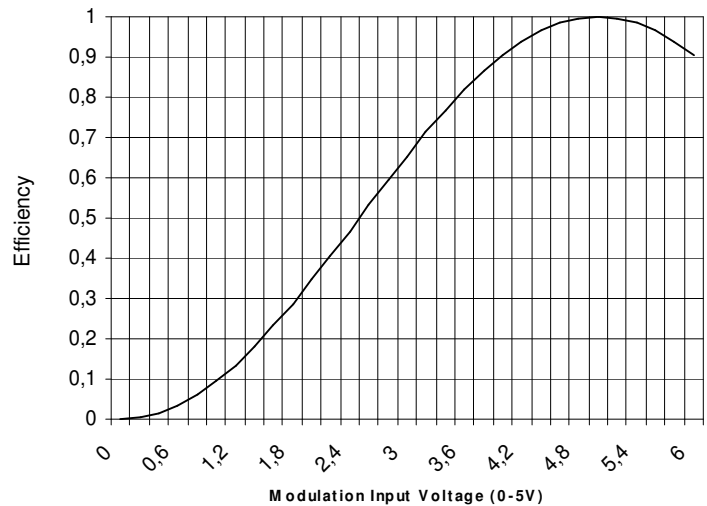
FIBER CONNECTOR

- **A** FC/APC
- **S** Super FC/PC
- **S905** SMA-905

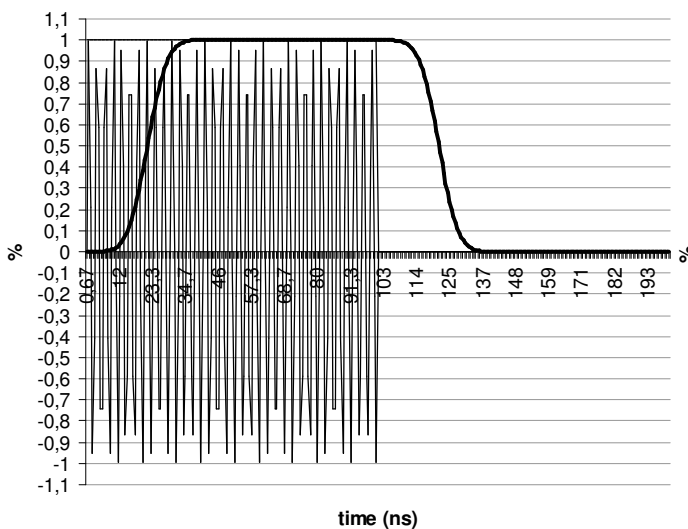
Relative Diffraction Efficiency versus RF power



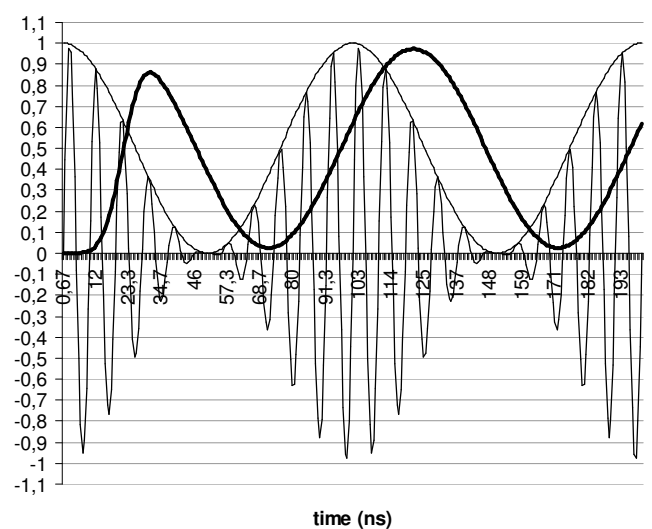
Relative Diffraction Efficiency response versus input voltage (Video In 5V)

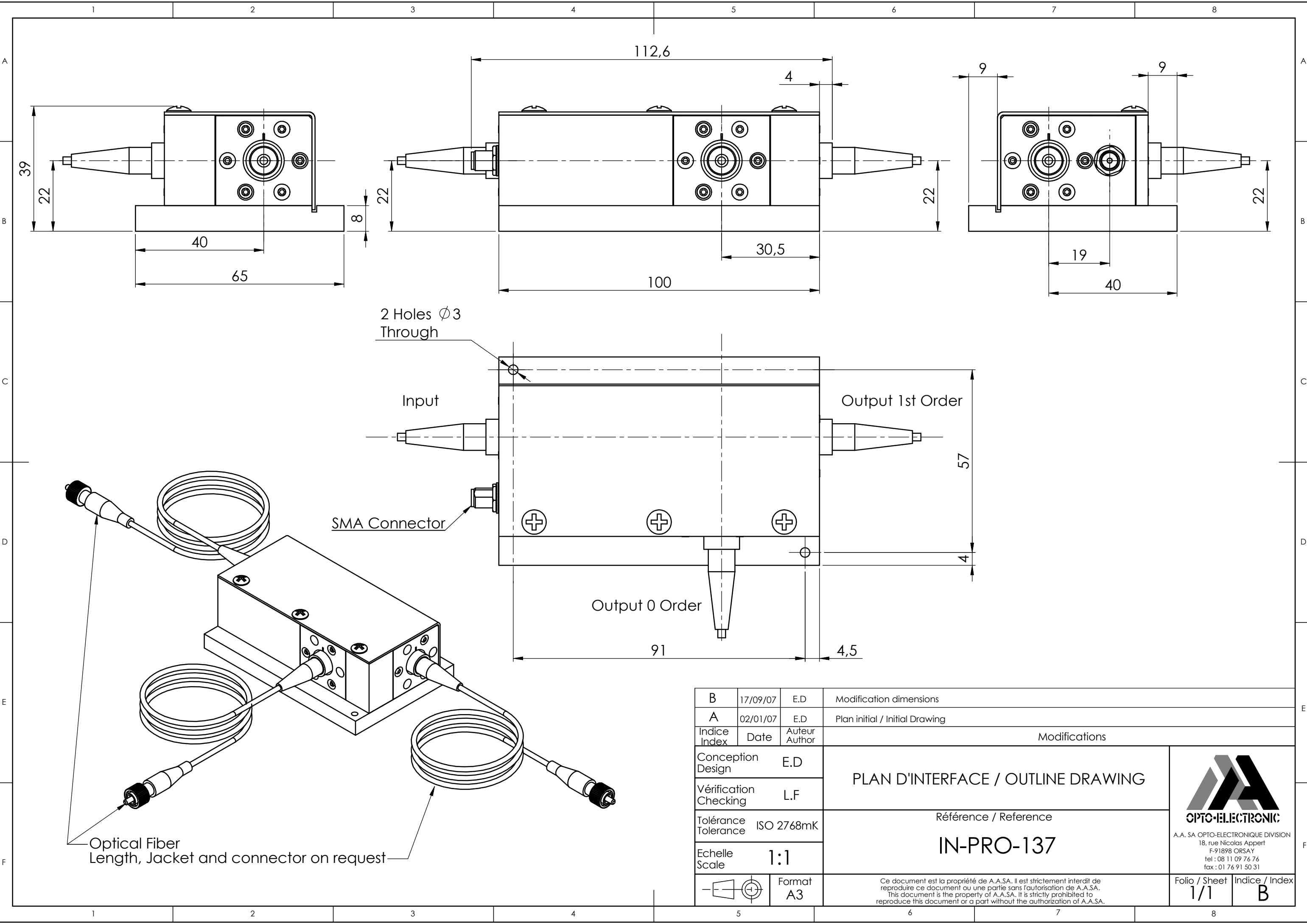


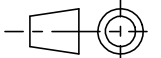
AOM temporal response



AOM temporal response





B	17/09/07	E.D	Modification dimensions
A	02/01/07	E.D	Plan initial / Initial Drawing
Indice Index	Date	Auteur Author	Modifications
Conception Design	E.D	PLAN D'INTERFACE / OUTLINE DRAWING	
Vérification Checking	L.F		
Tolérance Tolerance	ISO 2768mK	Référence / Reference	
Echelle Scale	1:1	IN-PRO-137	
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		Folio / Sheet 1/1	Indice / Index B



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