MODAxx-A2-31-x
MODAxx-A25-31-x

LOW CONSUMPTION FIXED FREQUENCY DRIVERS

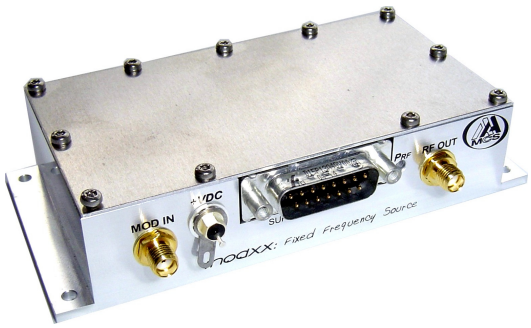
TECHNICAL DATA SHEET

Product Overview

These drivers are based on quartz oscillators and provide standard fixed frequencies such as 40 MHz, 80 MHz, 110 MHz.
They are designed so as to minimize the electrical power consumption in order to lower significantly the heat dissipation.
They will be ideal for portable applications or designs for which compact size is the key parameter.
The typical electrical consumption is 6 watts, for a nominal RF output power of 1.4W.

Features

- **MODAxx:** Fixed frequency: 80, 110, 180, 200 MHz
- RF power: typ 1.4 Watts
- Analog or TTL Modulation input controls
- Dual AM controls available Analog + TTL
- ROHS



Technical Specifications

Parameter	MODAxx – LOW CONSUMPTION (6W)
Carrier Frequency	80 / 110 / 180 / 200 MHz (Other on request)
Frequency Stability	Nom +/- 1 ppm/°C
Frequency Accuracy	< 50 ppm
Output RF Power (@1dB compression)	>1.2W, max 1.4 Watts @80MHz >1.4W, max 1.6 watts @110MHz >1.2W, max 1.4 watts @180-200MHz
Power Supply OEM version	12 VDC, nom 450 mA @80MHz 12 VDC, nom 550 mA @110MHz 12 VDC, nom 510 mA @180-200MHz
Power Supply Laboratory version	110 – 230 VAC
Modulation Input Control	Analog, TTL, or Analog+TTL (Impedance 50 Ohms or 1 Koms)
Rise Time/Fall time (10-90%) < 4 watts	< 10 ns @80 MHz, < 8 ns @110 MHz, < 5 ns @180 MHz, < 3 ns @F>200MHz
Input / Output Impedance	50 Ω
VSWR	< 1.5/1
Extinction Ratio	Nom 45 dB (>40 dB)
Input / Output Connector	SMA - DB15 / SMA
Size / Weight	129 X 61 X 30.1 mm3 / 500 g (OEM) 340 x235X90 mm / 3.6-3.8 Kg (Lab)
Heat Exchange	Conduction through baseplate for OEM versions AA adds a supplementary heatsink + fan on top of 4-20 Watts version Stand alone (fan integrated) for laboratory versions
Operating Temperature	10 to 40 °C (max Tcase 55°C)
Storage Temperature	-40 to +60 C° Non condensing

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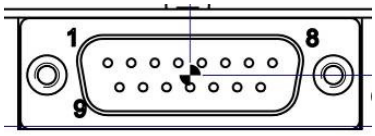
PIN connections

Pin 1	: *ANALOG INPUT*
Pin 3	: *TTL INPUT*
Pin 5	: *NC*
Pin 6	: *NC*
Pin 8	: *NC*
Pin 9, 11, 13, 15	: *POWER SUPPLY (+24VDC standard)*
Pin 2, 4, 7, 10, 12, 14	: *GND*



How to determine your model

Second MOD IN if available

MODA 110 – A 2 1k 51k – 34 45 60

CARRIER FREQUENCY
- **80, 110 MHz**
- **180, 200 MHz**
- **Gxx (refer to test sheet)**

POWER SUPPLY
- **A** 12 VDC

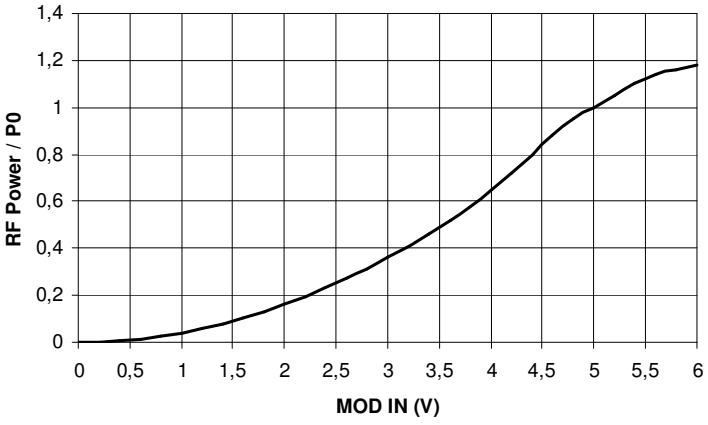
MODULATION INPUTS ANALOG AND/OR TTL
- **2** 0-1V
- **4** 0-5 V
- **5** TTL

EXTINCTION RATIO
- **--** 40 dB
- **60** 60 dB

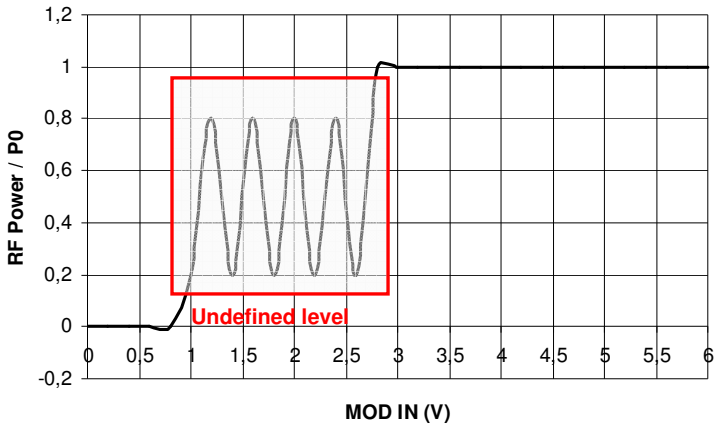
MAX RF POWER
- **31** 1.4 W

MOD IN IMPEDANCE
- **--** 50 Ω
- **1k** 1k Ω

Typ Relative Output RF power vs ANALOG MOD IN (0-5V)



Relative Output RF power vs DIGITAL MOD IN (TTL)



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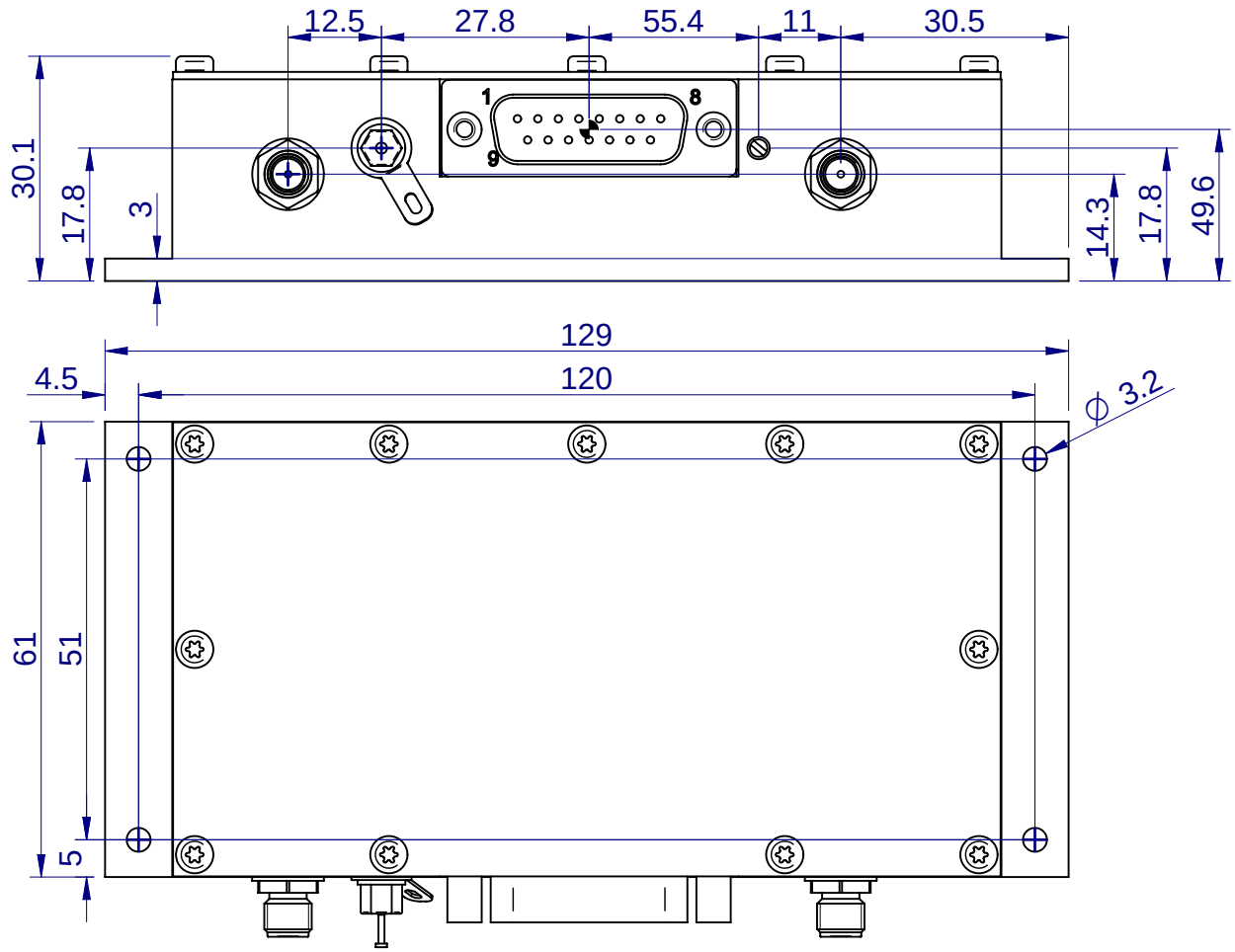

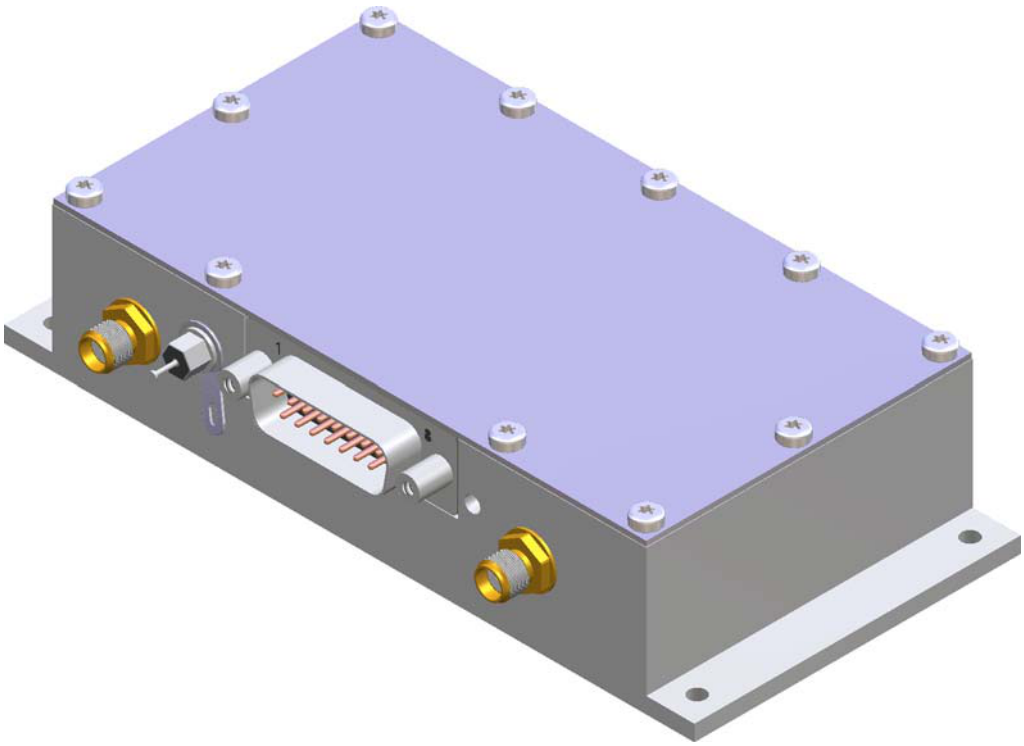

				Vérif. Nom: Date:	Cotes après traitement sauf contre indications	Tolérances: ±0.1mm ±1° 3.2µm
				Dess. Nom: Saint-Jean T. Date: 24/05/2006		
				Matière:		
				Traitement /Finition:		
				Titre: MODA XX assemblage et vue d'ensemble		
0	Création	24/05/06	T.S	N° Plan 1MODS06020.0055 Plan d'ensemble	Ech:	
Ind.	Description	Date	Visa		Page 1/1	

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