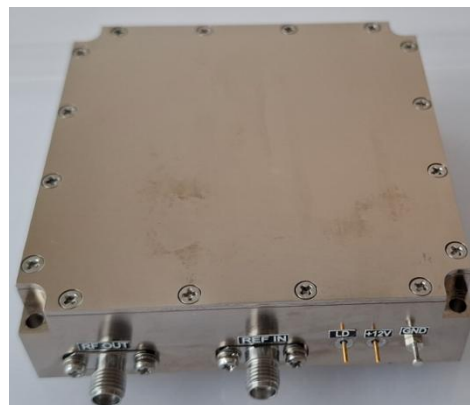


FEATURES:

- Low phase noise
- High output power
- Low spurious and sub-harmonics
- Internal TCXO with high stability and low phase noise
- Built-in external reference detection circuit and auto-switching



ELECTRICAL SPECIFICATIONS:

Parameter	Min.	Typ.		Max.		Units
Output Frequency		40				GHz
External Reference Frequency		100				MHz
Internal Reference Frequency		100				MHz
Frequency Accuracy w/o External Reference		±1		±2		ppm
Internal Reference Freq. Stability over Temp.		±0.5		±1		ppm
Output Power	17	18				dBm
Output Power Variation over Temperature		±1.25		±2.5		dB
External Reference Input Power	-5	0		+5		dBm
Sub-Harmonics		-75		-60		dBc
Spurious		-75		-70		dBc
Supply Voltage	11.8	12		12.2		V
Supply Current		400		500		mA
Lock Detect	(Out of Lock) 0-0.7			(In Lock) 3.3-3.5		V
Phase Noise		External Ref.	Internal Ref.	External Ref.	Internal Ref.	dBc/Hz
1kHz		-100	-90	-95	-85	
10kHz		-110	-104	-105	-95	
100kHz		-110	-108	-105	-100	
1MHz		-125	-125	-115	-115	

*Electrical specifications are given at 25°C.

*If external reference is applied, output frequency stability is the same as external reference frequency stability.

*Output phase noise depends on external reference phase noise with $20 \log (\text{Output Freq.} / \text{Ref. Freq.}) + 3\text{dB}$.

MECHANICAL SPECIFICATIONS:

Parameter	Value	Units
Dimensions	80x80x22	mm
Plating	Electroless Nickel	-
External Reference Input Connector	SMA Female	-
RF Output Connector	2.9mm Female	-

ENVIRONMENTAL SPECIFICATIONS:

Parameter	Min.	Max.	Units
Operating Temperature (Base Plate)	-40	+70	°C
Storage Temperature	-40	+85	°C
Humidity	MIL-STD-202H Method 103 Condition B		

MECHANICAL OUTLINE

- All dimensions are in mm
- Tolerances: +/- 0.2 mm

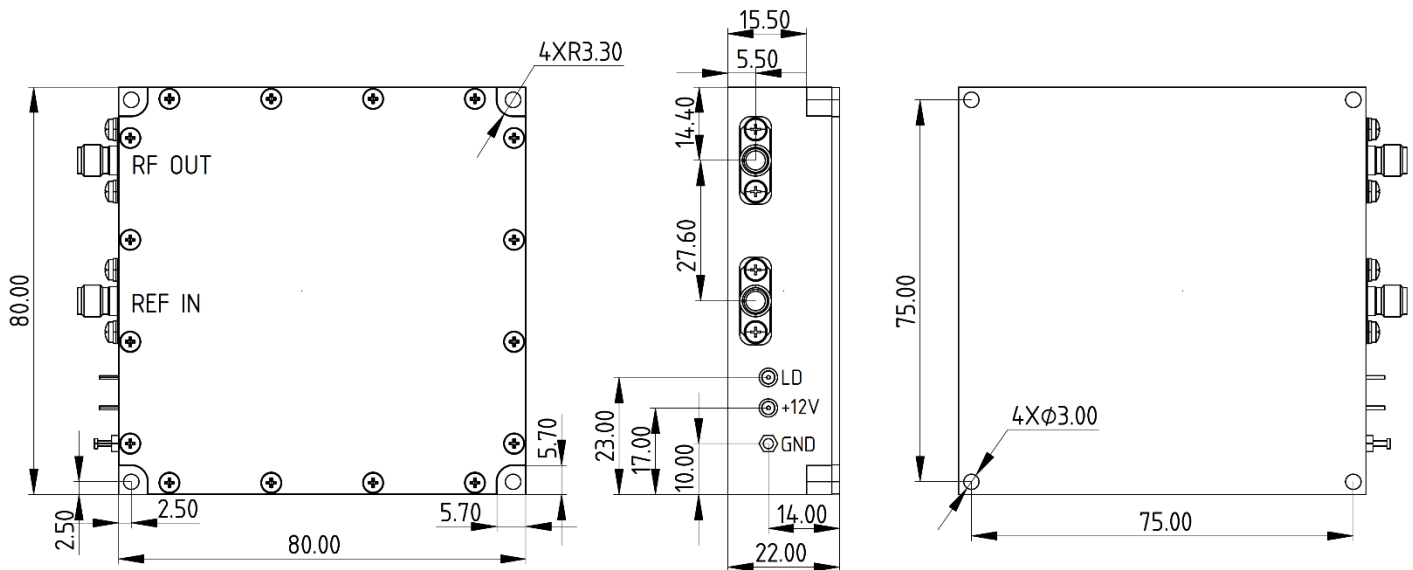




Figure 1: Phase Noise

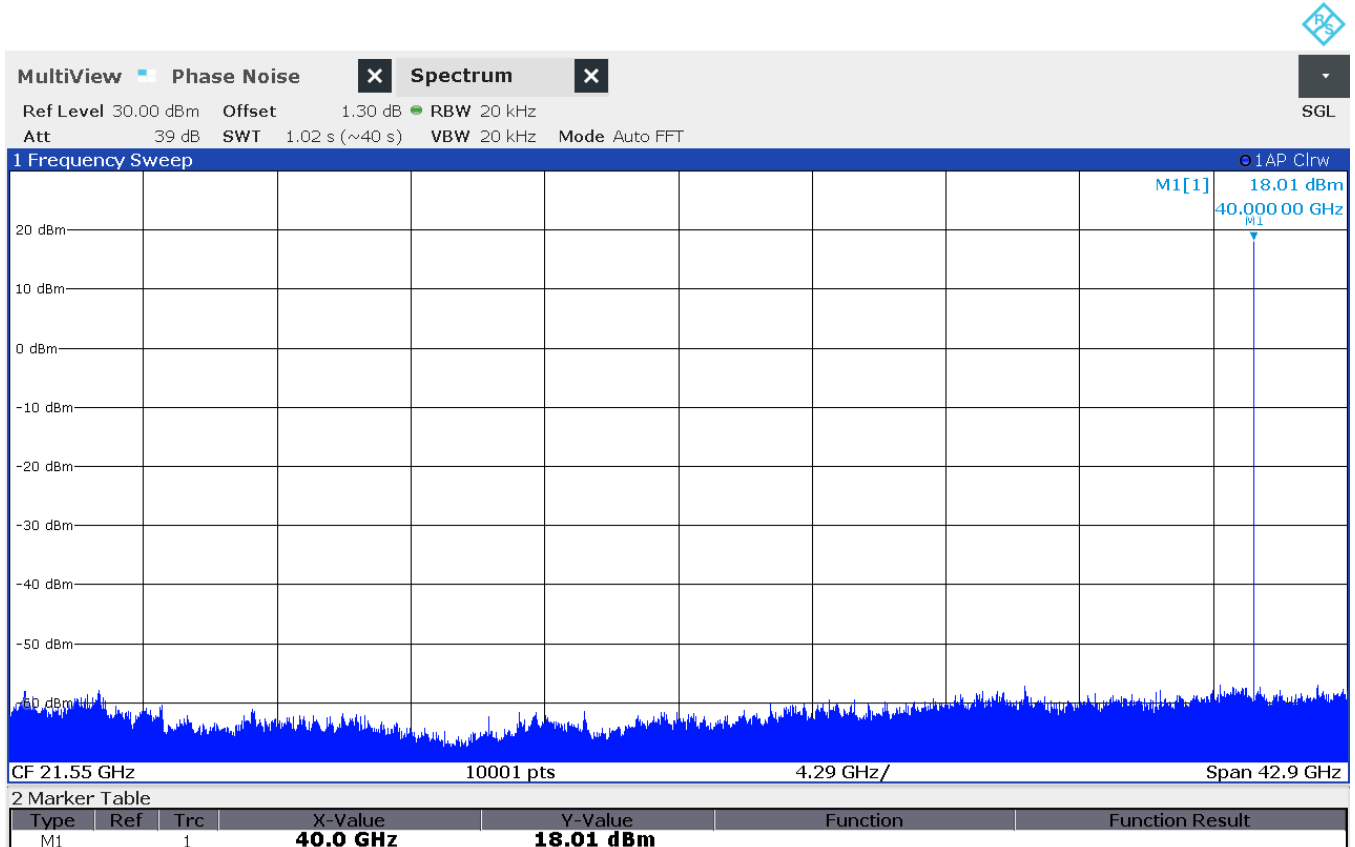


Figure 2: Spurious & Sub-Harmonics

REVISION HISTORY:

Rev. No.	Date	Description
P1	17-Jun-2022	Preliminary Release
A	11-Aug-2025	Original Release Updated <i>Specifications, Mechanical Outline</i> Added <i>Phase Noise, Spurious Graphs</i>