

FEATURES:

- Ultra-Low Phase Noise
- Low Spurious
- +5V Supply Voltage
- -185 dBc/Hz Phase Noise >100 kHz Offset


ELECTRICAL SPECIFICATIONS:

Parameter	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency (F)		100.0		MHz	
Frequency Stability ($\Delta F/F$)	-200		+200	ppb	vs. temp
RF Output	+15	+17	+19	dBm	
Output Load		50		ohms	+/-10%
Input Voltage, Vs	+4.75	+5	+5.25	Volts	
Power Consumption, start up			3.5	Watts	
Power Consumption, steady state			2	Watts	
Control Voltage, Vc	0		10.0	Volts	
Tuning Range		± 3		ppm	from nominal F
Tuning Slope	Positive				
Input Impedance	10			kohms	At Vc pin
Phase Noise (Under Static Conditions)			-105	dBc/Hz	10 Hz Offset
			-134	dBc/Hz	100 Hz Offset
			-164	dBc/Hz	1 kHz Offset
			-180	dBc/Hz	10 kHz Offset
			-185	dBc/Hz	>100 kHz Offset
Harmonics			-30	dBc	
Spurious			-80	dBc	
Warm-Up Time			5	minutes	for 0.1ppm accuracy
Modulation Bandwidth	DC		1	kHz	
Start Up			400	ms	

*Electrical specifications are given for Vs=+5V, Vc=+4.5V, TA= +25 $\pm$ 3 °C unless otherwise specified.

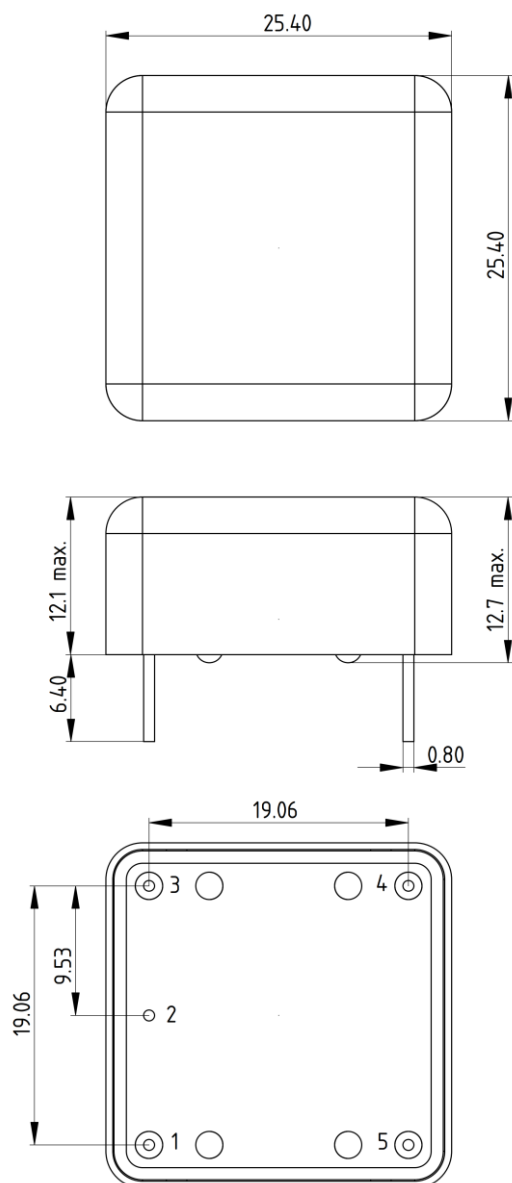
ENVIRONMENTAL SPECIFICATIONS:

Parameter	Min.	Typ.	Max.	Units
Operating Temperature Range	-40		+85	°C
Storage Temperature	-40		+85	°C
Mechanical Shock (Non-Operating)	MIL-STD-202H Method-213 Condition-J, 30g 11ms			
Vibration (Non-Operating)	MIL-STD-202H, Method-204 Condition-B, 5g, 10-2000 Hz			
Soldering	260 °C for 10s max. leads only, no reflow			

MECHANICAL SPECIFICATIONS:

Parameter	Value	Units
Dimensions (L x W x H)	25.4 x 25.4 x 12.7	mm
Weight	15.5	gr
Seal	Solder	
Mechanical Housing	Nickel Plated CRS	

- All dimensions are in mm
- General Tolerances: ± 0.2 mm



Pin #	Function
1	RF Out
2	GND
3	Vc
4	N/C
5	Vs

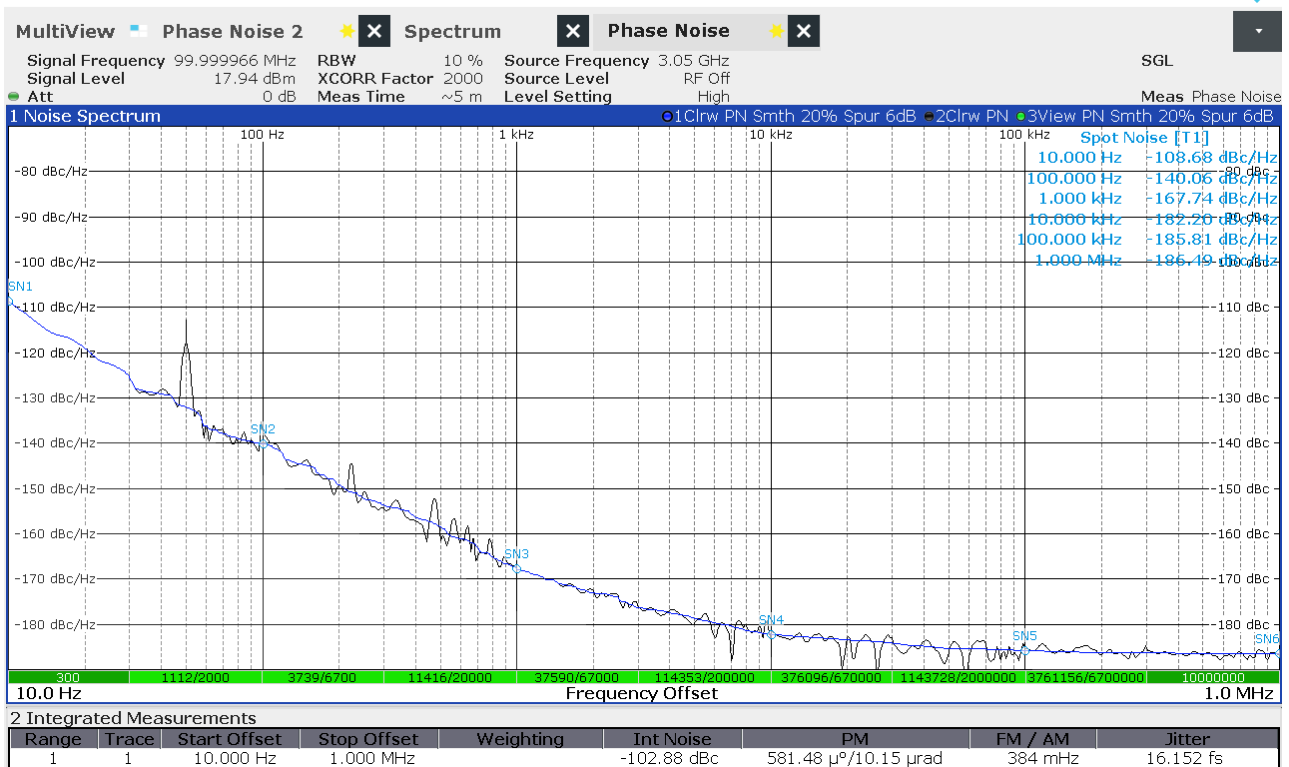


Figure 1: Typical Phase Noise @ 25°C

REVISION HISTORY:

Rev. No.	Date	Description
P1	23-Aug-2025	Preliminary Release
P2	07-Jul-2026	Updated <i>Electrical Specifications</i>