FEATURES:

- Ultra-Low Phase Noise
- Low Spurious and Sub-Harmonics
- +5V Supply Voltage
- -160 dBc/Hz Phase Noise >100 kHz Offset

ELECTRICAL SPECIFICATIONS:

Parameter	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency (F)		1000		MHz	
Frequency Stability (ΔF/F)	-200		+200	ppb	vs. temp
RF Output	+12	+14		dBm	
Output Load		50		ohms	+/-10%
Input Voltage, Vs	+4.75	5	+5.25	Volts	
Power Consumption, start up			4	Watts	
Power Consumption, steady state			2.5	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)			-82	dBc/Hz	10 Hz Offset
			-112	dBc/Hz	100 Hz Offset
			-138	dBc/Hz	1 kHz Offset
			-155	dBc/Hz	10 kHz Offset
			-160	dBc/Hz	>100 kHz Offset
Harmonics			-20	dBc	
Sub-Harmonics			-50	dBc	
Spurious			-80	dBc	
Warm-Up Time			5	minutes	for 0.1ppm accuracy
Modulation Bandwitdh	DC		1	kHz	
Start Up			400	ms	

* Electrical specifications are given for Vs=+5V, Vc=+4.5V, T_A= +25 ± 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			

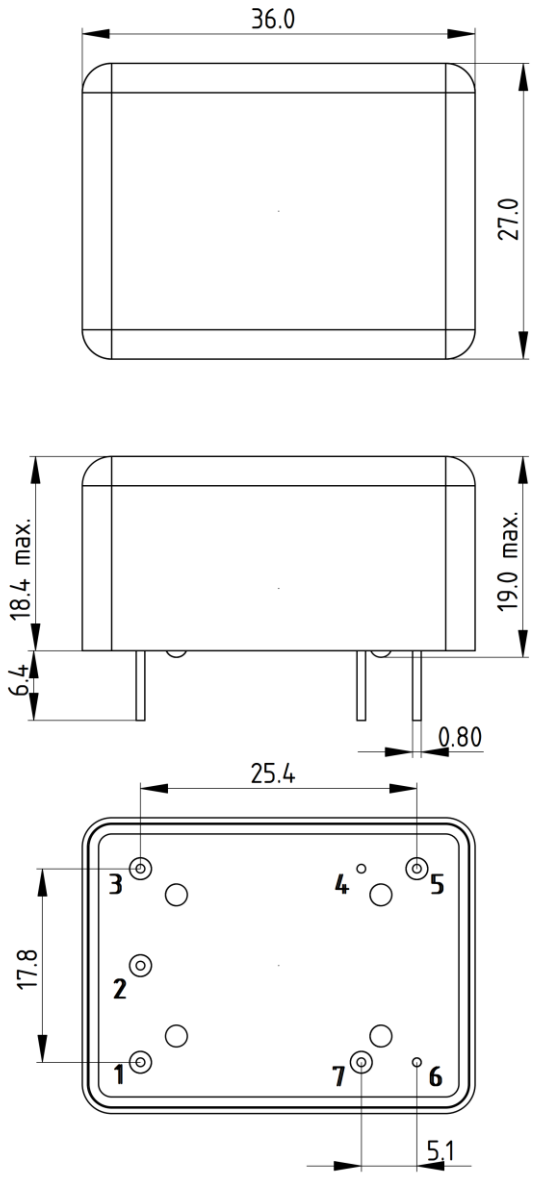
MECHANICAL SPECIFICATIONS:

Parameter	Value	Units
Dimensions (L x W x H)	36 x 27 x 19	mm
Weight	33.5	gr
Seal	Solder	
Mechanical Housing	Nickel Plated CRS	

MECHANICAL OUTLINE:

- All dimensions are in mm

- General Tolerances: ± 0.2 mm



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

2 Integrated Measurements

Range	Trace	Start Offset	Stop Offset	Weighting	Int Noise	PM	FM / AM	Jitter
1	1	10.000 Hz	1.000 MHz		-80.46 dBc	7.68 m°/134.09 µrad	5.843 Hz	21.341 fs

Figure 1: Typical Phase Noise @ 25°C

REVISION HISTORY:

Rev. No.	Date	Description
P1	23-Aug-2025	Preliminary Release
P2	07-Jul-2026	Updated *Electrical Specifications*