

FEATURES:

- Ultra-Low Phase Noise
 - 140 dBc/Hz Phase Noise at 10 Hz Offset for 10 MHz OCXO
 - 185 dBc/Hz Phase Noise >100 kHz Offset for 100 MHz OCXO
 - 160 dBc/Hz Phase Noise >100 kHz Offset for 1000 MHz OCXO
- Low Spurious
- +5V Supply Voltage (+12V Optional)

ELECTRICAL SPECIFICATIONS:

Parameter	Min.	Typ.	Max.	Units	Conditions
Nominal Frequency (F)	8	10.000	13	MHz	
	80	100.000	128	MHz	
	500	1000.000	1300	MHz	Multiplied Version
Frequency Stability ($\Delta F/F$) vs. temp**	-10		+10	ppb	10 MHz -40°C to +75°C
	-200		+200	ppb	100 MHz -40°C to +85°C
	-200		+200	ppb	1 GHz -40°C to +85°C
RF Output	+10	+13		dBm	10 MHz
	+15	+17		dBm	100 MHz
	+12	+14		dBm	1000 MHz
Output Load		50		ohms	+/-10%
Input Voltage, Vs	+4.75	+5	+5.25	Volts	+12V Optional
Power Consumption, start up			3.5	Watts	
Power Consumption, steady state			2	Watts	
Control Voltage, Vc	0		10.0	Volts	0-5V Optional
Tuning Range		± 2.5		ppm	100 MHz, 1000 MHz
		± 0.5		ppm	10 MHz
Tuning Slope	Positive				
Input Impedance	10			kohms	At Vc pin
Phase Noise (Under Static Conditions) 10 MHz***			-110	dBc/Hz	1 Hz Offset
			-140	dBc/Hz	10 Hz Offset
			-150	dBc/Hz	100 Hz Offset
			-160	dBc/Hz	1 kHz Offset
			-165	dBc/Hz	10 kHz Offset
			-170	dBc/Hz	>100 kHz Offset
Phase Noise (Under Static Conditions) 100 MHz***			-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
Phase Noise (Under Static Conditions) 1000 MHz***			-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			-30	dBc	
			-15	dBc	Multiplied Version
Spurious			-80	dBc	
Warm-Up Time			5	minutes	for 0.1ppm accuracy

Parameter	Min.	Typ.	Max.	Units	Conditions
Modulation Bandwidth	DC		1	kHz	
Start Up			400	ms	

*Electrical specifications are given for $V_s=+5V$, $V_c=+4.5V$, $T_A= +25 \pm 3^\circ C$ unless otherwise specified.

** Frequency stability values are for the maximum available temperature range. Better values are available for lower temperature range

*** Phase noise levels are for the ultra low phase models. Higher phase noise levels are available for premium models.

ENVIRONMENTAL SPECIFICATIONS:

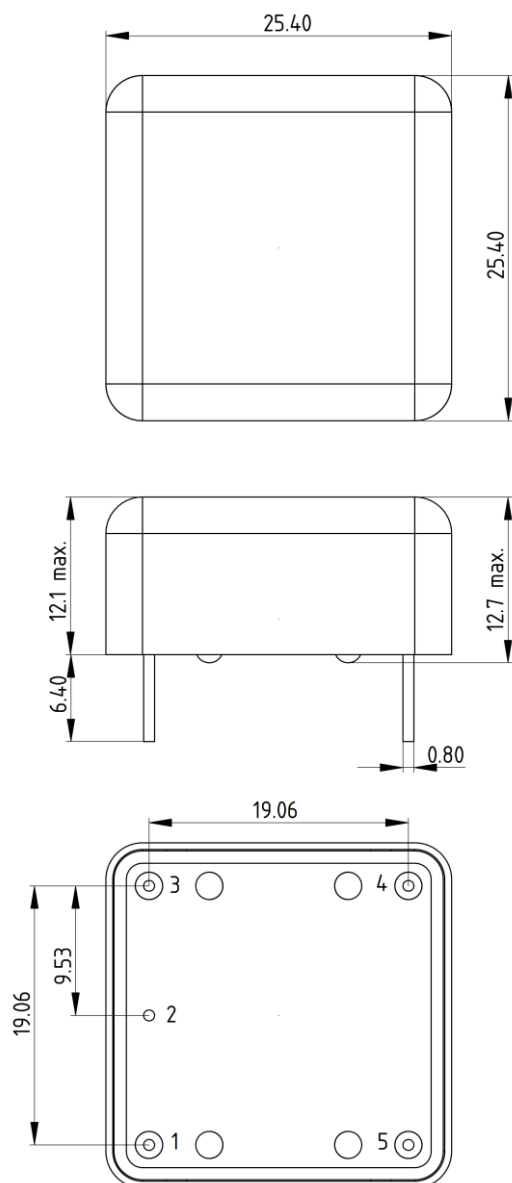
Parameter	Min.	Typ.	Max.	Units
Operating Temperature Range	-40		+85	$^\circ C$
Storage Temperature	-40		+85	$^\circ C$
Mechanical Shock (Non-Operating)	MIL-STD-202H Method-213 Condition-J, 30g 11ms			
Vibration (Non-Operating)	MIL-STD-202H, Method-204 Condition-B, 5g, 10-2000 Hz			
Soldering	260 $^\circ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

MECHANICAL SPECIFICATIONS:

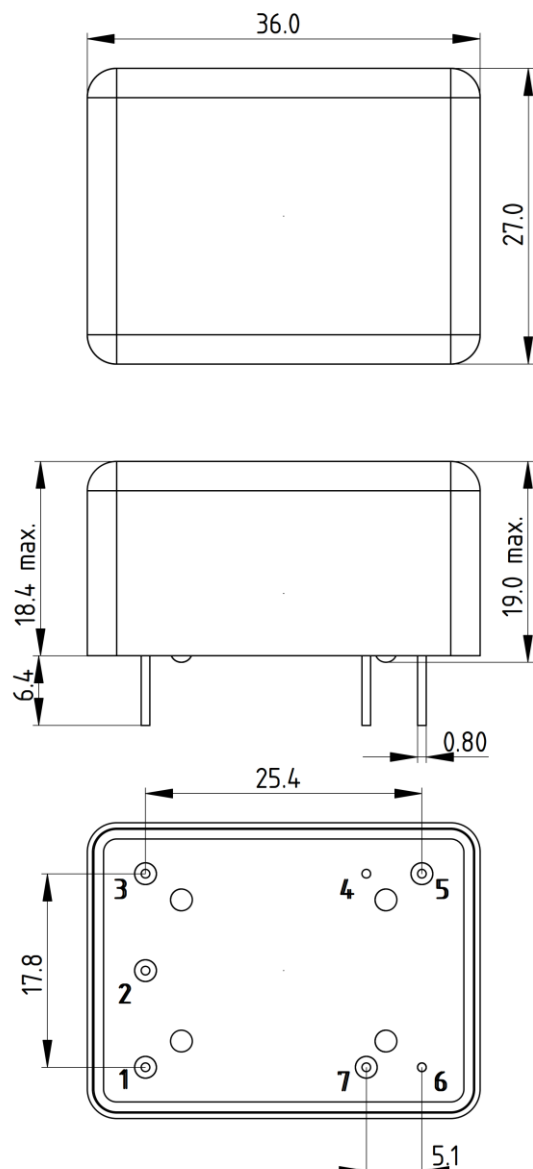
Parameter	Value	Units	Note
Dimensions (L x W x H)	25.4 x 25.4 x 12.7	mm	For 10 MHz and 100 MHz
	20.7 x 13.1 x 9.5	mm	Optional for 100 MHz
	36 x 27 x 19	mm	For 1000 MHz, optional for 10 MHz and 100 MHz
	36 x 27 x 15	mm	Optional for 10 MHz, 100 MHz and 1000 MHz
Seal	Solder		
Mechanical Housing	Nickel Plated CRS		

MECHANICAL OUTLINES:

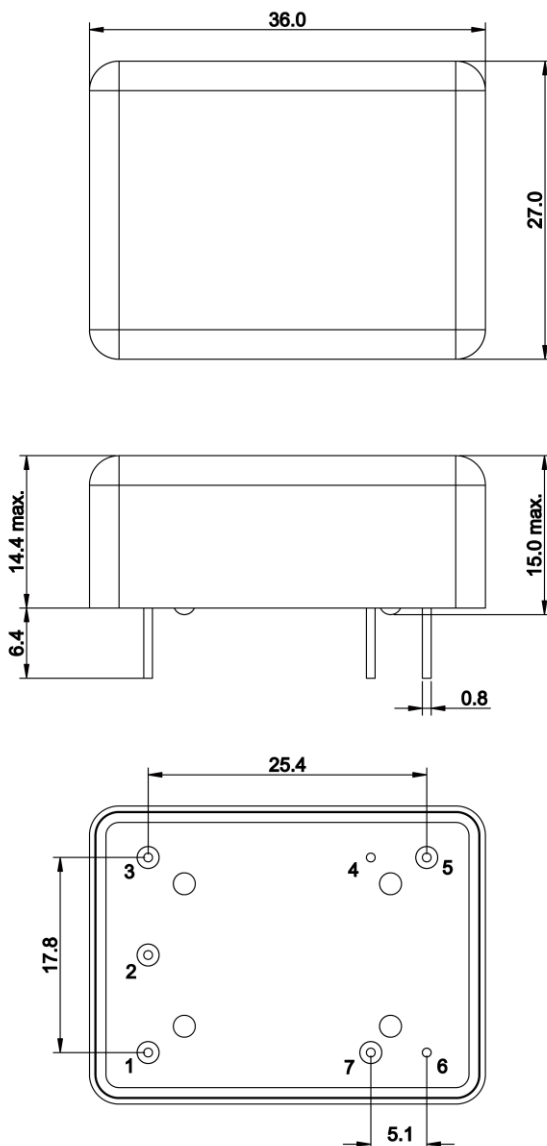
- All dimensions are in mm
- Tolerances: $\pm 0.2\text{mm}$



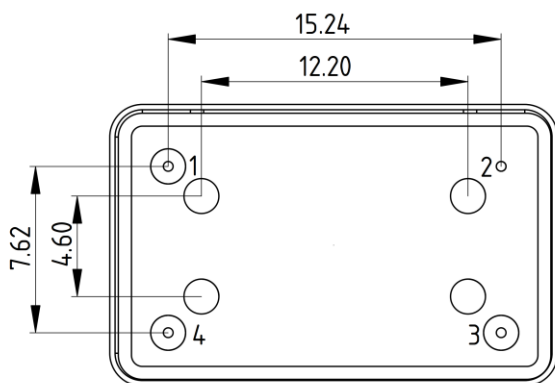
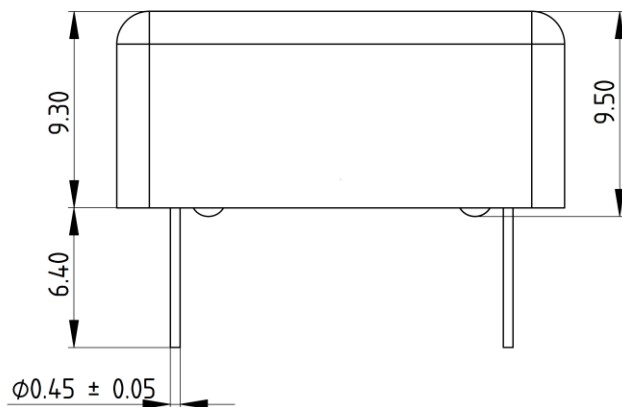
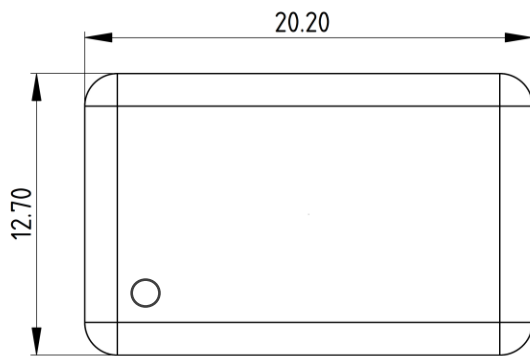
Pin #	Function
1	RF Out
2	GND
3	Vc
4	N/C
5	Vs



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



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



Pin #	Pin Name	Function
1	Vc	Control Voltage
2	GND	Ground
3	RF Out	RF Output
4	Vs	Supply Voltage



REVISION HISTORY:

Rev. No.	Date	Description
P1	07-Jul-2026	Preliminary Release