

OCXO5151L

Ultra-Low Phase Noise OCXO

Features and Benefits

- Ultra-Low phase noise
- Sine wave output
- Frequency Tuning Input
- +14dBm min. output level
- 50x50x19mm

Description

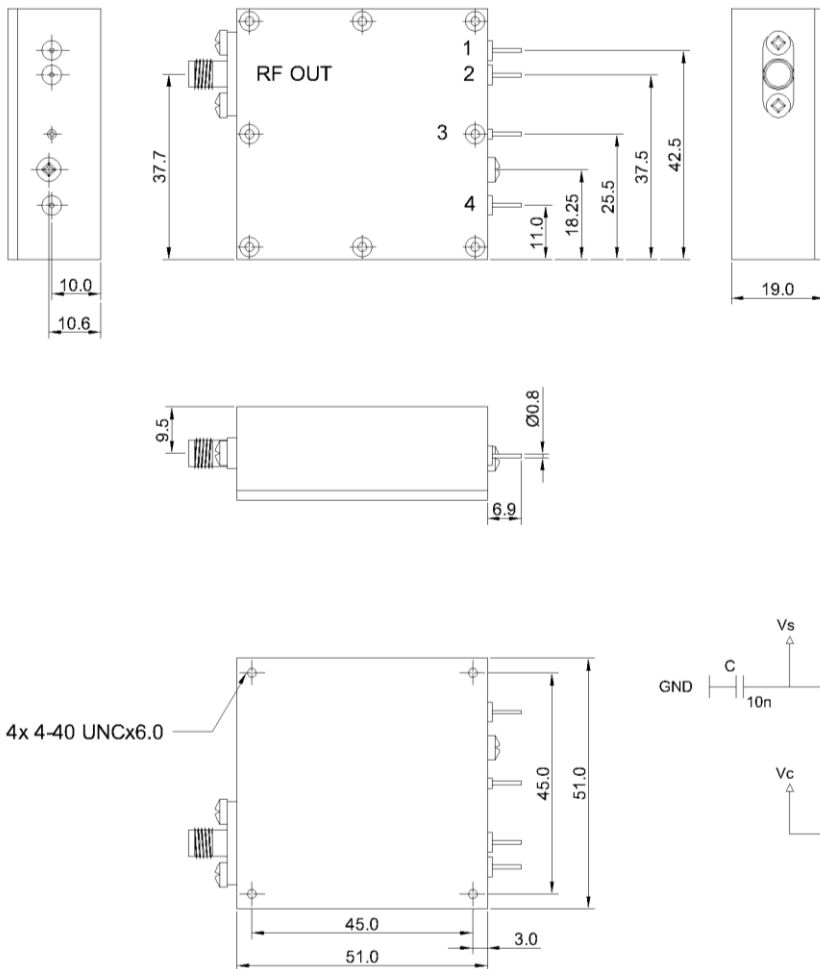
OCXO5151L series is ultra-low phase noise floor of -180dBc/Hz

Typical Applications

- Signal Analyzer Reference for internal synthesizers
- SATCOM Systems
- Harsh Environment Applications

Mechanical Drawing & Pin Connections

Drawing No: MD140058-1



Pin Connection:

Pin#	Symbol	Function
1	Vs	Supply Voltage
2	N.C.	No Connection
3	GND	Ground
4	Vc	Control Voltage(EFC)
SMA	RF OUT	RF Output

Unit : mm

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Specifications

OCXO Specification	Sym	Condition	Value			Unit	Note				
			Min.	Typ.	Max.						
Frequency Range	F ₀		80		125	MHz					
Standard Frequencies			100.000/120.000			MHz					
RF Output											
Output Waveform			Sine wave								
Load	RL			50		Ohm					
Output Level		@V _c =5.0V	+14	+16		dBm					
Harmonics					-40	dBc					
Spurious					-110	dBc					
G-Sensitivity		Per axis			1.0	ppb/g					
Power Supply											
Voltage	V _{cc}		11.400	12.000	12.6000	V	Other supply voltage on request				
Current Consumption		Warm-up			475	mA					
		Steady-state@+25°C			275	mA					
Warm-up Time@+25°C		Δf _{final} /f ₀ <+/-0.2ppm			5	min					
Frequency Control*											
Frequency Adjust Range			+/-1	+/-2		ppm	Tuning Slope: Positive				
Control Voltage			0	5	10	V					
Internal Resistance			100			Kohm					
Frequency Stability											
Initial Tolerance @+25°C		V _c =5V			+/-300	ppb					
Vs. Operating Temperature Range		-10 °C to +60°C Steady state			+/-200	ppb	Other stability and temperature range on request				
Vs. Supply Voltage Variation(Pushing)		V _s +/-5%		+/-20		ppb					
Long Term Per Day		After 30days operation			+/-2	ppb					
Long Term Per Year		After 30days operation			+/-200	ppb					
Phase Noise											
Offset	100MHz					120MHz					Unit
	A	B	C	D	E	A	B	C	D	E	
10Hz	-90	-95	-97	-100	-105	-85	-90	-95	-97	-100	dBc/Hz
100Hz	-125	-130	-132	-135	-137	-118	-122	-125	-127	-130	
1KHz	-155	-158	-160	-162	-164	-148	-150	-153	-155	-157	
10KHz	-175	-176	-176	-176	-178	-160	-165	-168	-171	-175	
100KHz	-180	-180	-180	-180	-180	-180	-180	-180	-180	-180	
Environmental											
Operating Temperature Range	-10°C to +60°C										
Storage Temperature Range	-55°C to +125°C										
Size	51.0 x 51.0 x 19.0mm Max.										
Weight	85g Max.										