



**FEATURE**

This Low Noise Oven Controlled Crystal Oscillator available in different formats from 51x51x25 mm (2"x2"x1") till 25x25x12 mm (1"x1"x0.5"), is specially designed to meet the request of the most demanding phase noise applications in the instrumentation and defence industries.

The LNO 100 @ 100 MHz can be provided with a guaranteed phase noise level of up to -165 dBc/Hz @ 1KHz and a G-sensitivity of up to 0.5 ppb/G (Gamma).

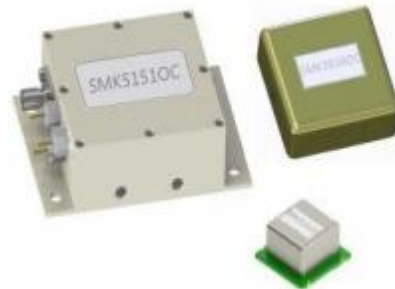
**APPLICATION**

Supply Voltage: +12V

Pin through hole, SMD package or with connectors

Frequency Stability vs. Temperature: ± 0.1ppm

Ageing: from ± 2ppm over 10 years

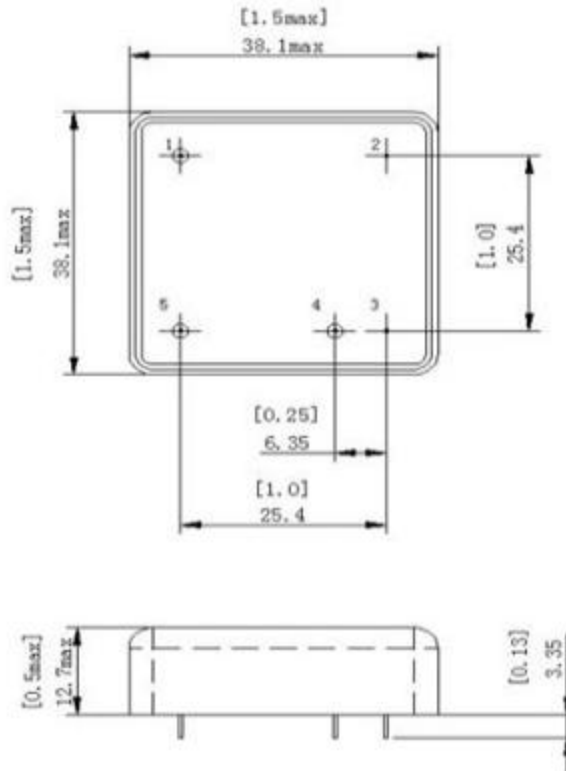
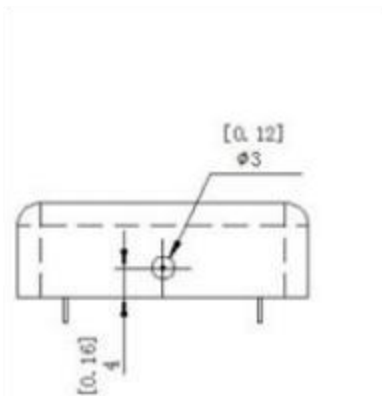
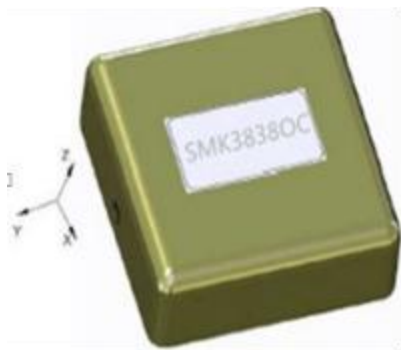


**Specification for electrical appliances**

Parameter	5V		12V		Unit	
	MIN	MAX	MIN	MAX		
Supply Voltage(VDD) 5%	4.75	5.25	11.4	12.6	V	
Frequency Range	80	125	80	125	MHz	
Standard Frequency	80	100	125			
Frequency Tolerance*	±2		±2		ppm	
Frequency ageing after 30 days of continuous operation	1st year ± 0.5				ppm	
	10 years ± 2					
Power consumption	2.2		2.2		W	
	3.7		3.7		W	
Frequency variation vs. load	± 0.02		± 0.02		ppm	
Frequency stability vs temperature	±0.1		±0.1		ppm	
Output waveform	Sine					
Harmonics level	-25 dBc		-25 dBc		dBc	
Spurious level	-90		-90		dBc	
Output level	11 , 13 , 15		11, 13, 15		dBm	
Operating temperature range	-40	85	-40	85	°C	
Parameters	Performance level	100 Hz	1 KHz	10 KHz	100 KHz	Unit
@ 100 MHz, 12 V -20°C to +70°C	58	-130	-158	-172	-172	dBc/Hz
	62	-130	-162	-175	-175	dBc/Hz
	65	-135	-165	-178	-178	dBc/Hz



**DIMENSION (mm)**

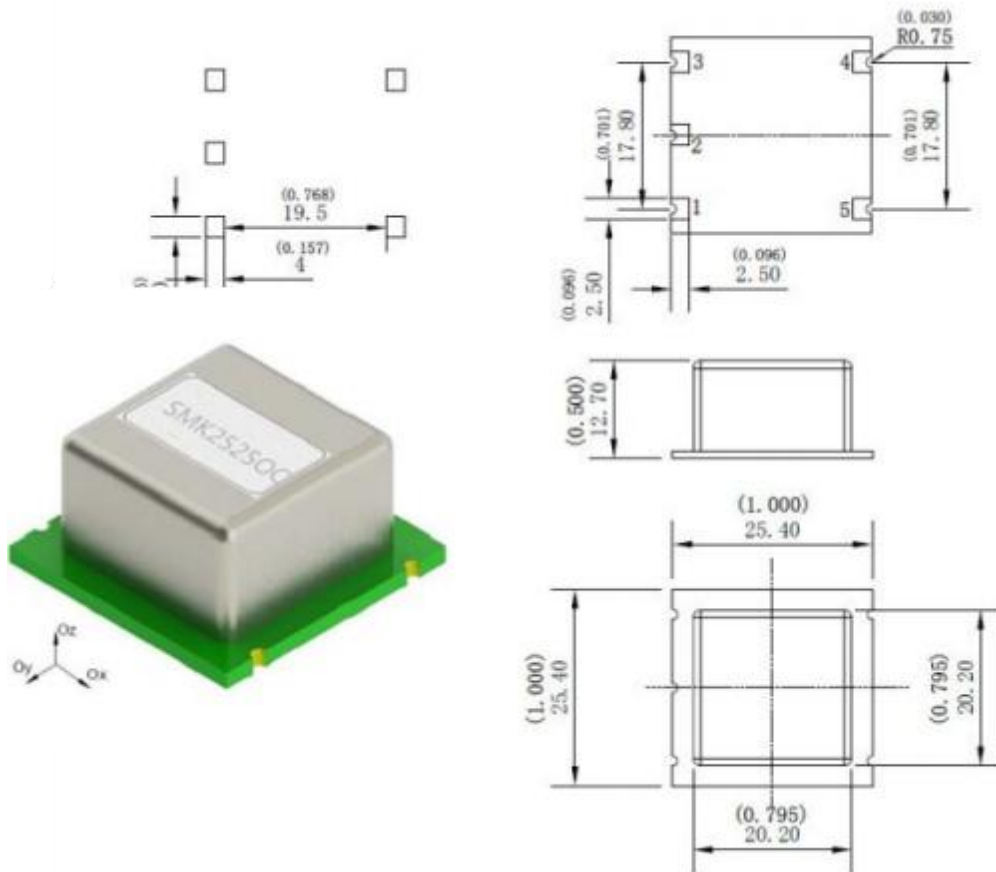


DOCUMENT:	150-Plan d'encombrement 150-Outline drawing		GEN. TOL +/- 0.1	UNITS: mm [inch]	SCALE 3:2
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Pin number	Name	Description
1	Vcc	Supply voltage
2	GND	Electrical & mechanical ground
3	GND	Electrical & mechanical ground
4	Fout	Frequency output
5	Vc	Voltage control for electrical tuning



**DIMENSION (mm)**



DOCUMENT: 150-Plan d'encombrement  
 150-Outline drawing

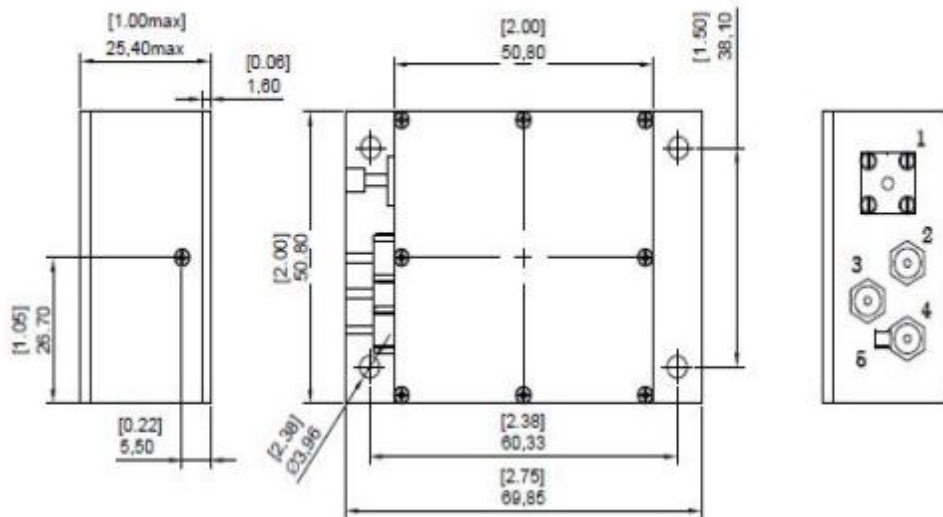


GEN. TOL. UNITS. SCALE  
 +/- 0.1 mm [inch] 2:1

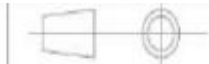
Pin number	Name	Description
1	NC	Not Connected
2	NC	Not Connected
3	Vcc	Supply voltage
4	Fout	Frequency output
5	GND	Electrical & mechanical ground



DIMENSION (mm)



DOCUMENT: 150-Plan d'encombremet  
 150-Outline drawing



GEN. TOL: +/- 0.1  
 UNITS: mm [inch]  
 SCALE: 1:1

Pin number	Name	Function
1	Fout	Frequency output
2	Vc	Voltage control for electrical tuning
3	Vref	Reference voltage
4	Vcc	Supply voltage
5	GND	Electrical & mechanical ground