



### Features and Benefits

Wide operating temperature range from -55°C to +85°C  
SMD sine wave output  
High frequency stability  
Low phase noise

### Typical Applications

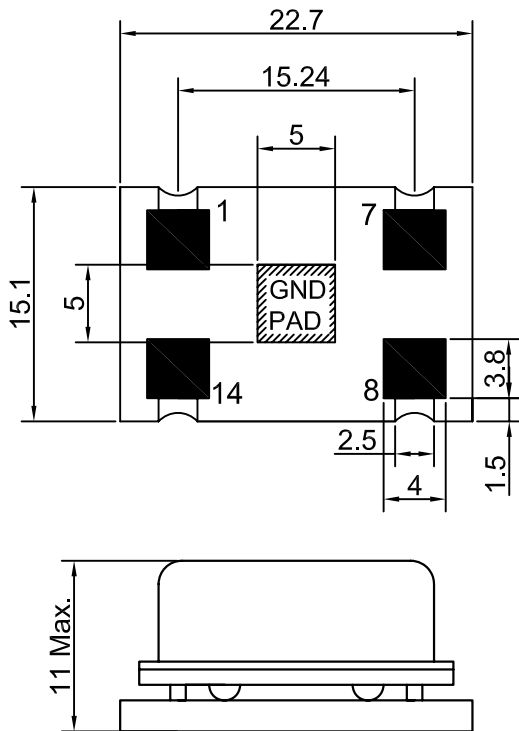
Base Station  
Synchronization  
Satellite Modem


### Description

OCXO2215LS series offers wide temperature operation from -55°C to +85°C with outstanding frequency stability and low phase noise performance.

### Mechanical Drawing & Pin Connections

**Drawing No:** MD170016-1



 No pcbtrack beneath this area

#### Pin Connections

Pin	Symbol	Function
1	Vc	Control Voltage(EFC)
7	GND	Ground
8	RF Out	RF Output
14	Vs	Supply Voltage

Unit : mm  
1mm=0.0394inch



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F <sub>nom</sub>		10		125	MHz	
Standard Frequencies			10/20/80/100			MHz	
<b>RF Output</b>							
Output Wave Form :			Sine wave				
Load	R <sub>L</sub>		50			Ohm	±10%
Output Level			+3			dBm	
Harmonics					-25	dBc	
Warm-up time		Δf <sub>final</sub> /f <sub>0</sub> <±0.1ppm			2	min	
<b>Power Supply</b>							
Supply Voltage	V <sub>s</sub>		11.4	12.0	12.6	V	
Current Consumption		Steady state			100	mA	@ +25°C
		Warm-up			200	mA	
<b>Frequency Control</b>							
Electronic Frequency Control(EFC)			±2		±5	ppm	AT-Cut
			±1			ppm	SC-Cut
EFC Voltage	V <sub>c</sub>		0.25	2.5	4.75	V	
EFC Slope (Δf/ΔVc)			positive				
EFC input impedance			100			kOhm	
<b>Frequency Stability</b>							
Initial Tolerance @+25°C		V <sub>c</sub> @ Centre value			±500	ppb	
Vs. Temperature		From -55°C to +85°C Steady state			±10	ppb	Optional: ±5ppb @-40°C to+85°C
Vs. Supply Voltage Variation		Vs±5%			±10	ppb	Pushing
Vs. load change		R <sub>L</sub> +/-10%			±20	ppb	Pulling
Aging Per Day		after 30days of operation			±10	ppb	AT-Cut
					±2	ppb	SC-Cut
Aging 1 <sup>st</sup> Year		after 30days of operation		±300	±500	ppb	AT-Cut
				±100	±200	ppb	SC-Cut
Phase Noise			Consult our sales				
<b>Temperature Range</b>							
Operating Temperature			-55°C to +85°C				
Storage Temperature			-55°C to +125°C				
<b>Environmental Condition</b>							
<b>Test</b>	<b>IEC 60679-1 Clause</b>		<b>MIL-PRF-55310D Clause</b>				
Sealing Tests	5.6.2		3.6.1.2				
Solderability Resistance to Soldering Heat	5.6.3		3.6.52 3.6.48				
Shock	5.6.8		3.6.40				
Vibration, Sinusoidal	5.6.7.1		3.6.38.1				
			3.6.38.2				
Vibration, Random	5.6.7.3		3.6.38.3				
			3.6.38.4				
Endurance tests - ageing - extended aging	5.7.1		4.8.35				
	5.7.2						