



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

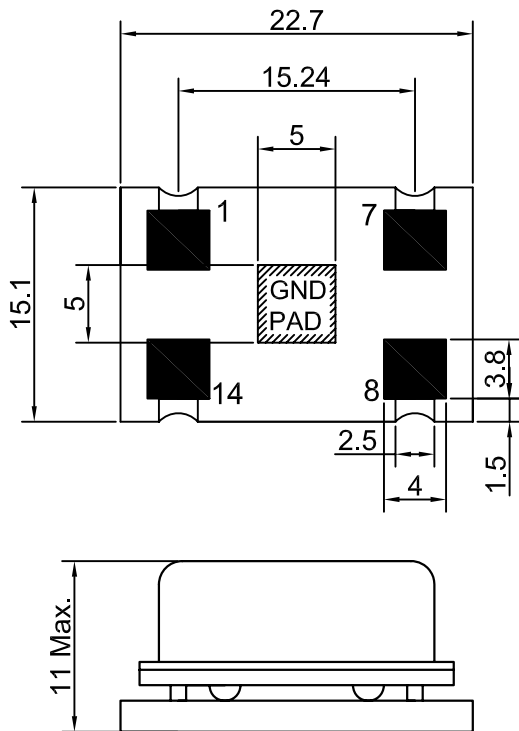
Base Station
Synchronization
Satellite Modem

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 _{nom}		10		125	MHz	
Standard Frequencies			10/20/80/100			MHz	
RF Output							
Output Wave Form :			Sine wave				
Load	R _L		50			Ohm	±10%
Output Level			+3			dBm	
Harmonics					-25	dBc	
Warm-up time		$\Delta f_{final}/f_0 < \pm 0.1 \text{ ppm}$			2	min	
Power Supply							
Supply Voltage	V _s		4.75	5.0	5.25	V	
Current Consumption		Steady state			200	mA	@ +25°C
		Warm-up			500	mA	
Frequency Control							
Electronic Frequency Control(EFC)			±2		±5	ppm	AT-Cut
			±1			ppm	SC-Cut
EFC Voltage	V _c		0.25	2.5	4.75	V	
EFC Slope ($\Delta f/\Delta V_c$)			positive				
EFC input impedance			100			kOhm	
Frequency Stability							
Initial Tolerance @+25°C		V _c @ 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 _L +/-10%			±20	ppb	Pulling
Aging Per Day		after 30days of operation			±10	ppb	AT-Cut
					±2	ppb	SC-Cut
Aging 1 st Year		after 30days of operation		±300	±500	ppb	AT-Cut
				±100	±200	ppb	SC-Cut
Phase Noise			Consult our sales				
Temperature Range							
Operating Temperature			-55°C to +85°C				
Storage Temperature			-55°C to +125°C				
Environmental Condition							
Test	IEC 60679-1 Clause			MIL-PRF-55310D Clause			
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						