

Features and Benefits

80MHz to 160MHz frequency Output
 3.3V supply Voltage
 50mA MAX supply current
 20.0x13.1x6.1mm max

Description

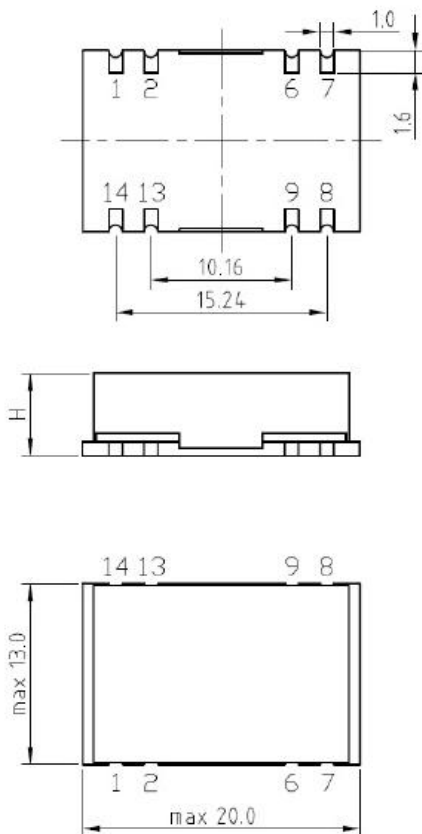
PLXO2013L is Phase noise Locked with HCMOS output

Typical Applications

SATCOM Receiver
 Test Equipment Radar

Mechanical Drawing & Pin Connections

Drawing No: MD140074-1

**Pin connections:**

Pin #	Symbol	Function
1	V_c	VCXO Control Voltage Output
2	LD	Lock Detect Output
6	GND	Ground
7	GND	Ground
8	RF OUT	RF Output
9	GND	Ground
13	FREF	Reference Frequency Input
14	V_s	Supply Voltage

Specifications

OCXO Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Reference Frequency(Input)		f _{REF}		5		100	MHz	
Output Frequency		f _{OUT}		80		160	MHz	
RF Output (Locked)								
Signal Waveform				HCMOS				
Load			+/-10%		15		pF	
Symmetry(Duty Cycle)			@ V _s /2	40		60	%	
Rise & Decay Time						5	ns	
Suppression Of Channel Spurious			@ N x f _{CN} and f _{OUT} +/- N x f _{CN}	-80			dBc	
Other Non-harmonic Spurious				-100			dBc	
Supply Voltage								
Supply Voltage		V _s		3.15	3.3	3.45	V	
Current Consumption						50	mA	
Reference Input								
Frequency Accuracy						+/-2	ppm	
Signal Waveform				Sine or Square wave				
Input Level				0.5		V _s	V _{p-p}	
Input Impedance				10			kOhm	
Input Capacitance						10	pF	
Frequency Locking								
Frequency Locking Range				Lock on f _{REF} under worst conditions over 10 years				
VCXO Control Voltage(V _c) Output			R _{IN} = 470Ω	0.15		3.00	V	
Lock Detect(LD) Output			HCMOS levels	LD = High PLL locked LD = Low PLL out lock				
Loop Filter Parameters								
Natural Loop Frequency f _N				To be optimized to application w.r.t to phase noise and setting performance			Hz	For more information, Please consult sale
Phase Margin Φ _R							°	
Channel Spacing f _{CH}							kHz	
Lock-in Time							s	
Frequency Stability (Free Running)								
vs. Operating Temperature Range						+/-10	ppm	
vs. Supply Voltage Variation (Pushing)			V _s +/- 5%			+/-2	ppm	
vs. Load Change (Pulling)			Load +/- 10%			+/-2	ppm	
Aging	Long Term Per Year		@ +40℃			+/-2	ppm	
Phase Noise								
Consult Sale								
Environmental								
Operating Temperature Range		-20℃ to +70℃						
Storage Temperature Range		-40℃ to +85℃						
Packing		Tape & Reel						
Size		20.0x13.1x6.1mm max						
Weight		3g max						