Dynamic Engineers Inc.
2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA
TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com

TCXO1811BE_Sine
14 PIN DIP Package Sinewave TCXO

Features and Benefits

Frequency range: 6-190MHz
Supply voltage: 3.3V or 5.0V
Steady current: 12-30mA Max
Output waveform: Sinewave
Frequency stability vs. operating temperature: ±0.5ppm
Aging: ±1.0ppm per year
Phase noise@100KHz: -145dBc/Hz
Operating temperature: -40°C to +85°C
Size: 18.3x11.7x7.0mm

Typical Applications

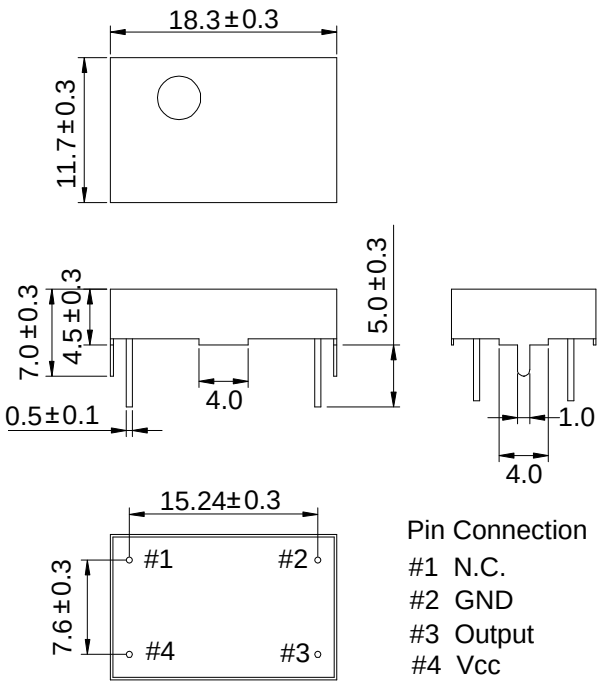
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description

TCXO1811BE_Sine offers wide temperature operation with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD230003-1



Pin Connection
#1 N.C.
#2 GND
#3 Output
#4 Vcc

Unit in mm
1mm = 0.0394 inches

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Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F_{nom}		6		190	MHz	
RF Output							
Signal Waveform				Sinewave			
Level		Vcc=5V		10		dBm	
		Vcc=3.3V		0		dBm	
Load				50		ohm	
Power Supply							
Supply Voltage	V_{cc}	±5%		5.0		V	
		±5%		3.3			
Input Current		6MHz			12	mA	
		190MHz			30	mA	
Frequency Adjustment Range							
Frequency Adjustment		by internal trimmer	±3.0			ppm	
Frequency Stability							
Versus Operating Temperature			±0.5		±5.0	ppm	See ordering information
Versus supply voltage		±5% change			±0.2	ppm	
Versus Load		15pF±10%			±0.2	ppm	
Aging 1st Year					±1.0	ppm	
SSB Phase noise (20MHz)		10Hz		-80		dBc/Hz	
		100Hz		-120		dBc/Hz	
		1kHz		-135		dBc/Hz	
		10kHz		-140		dBc/Hz	
		100kHz		-145		dBc/Hz	
Environmental,Mechanical Conditions							
Operating temperature range	See ordering information						
Storage temperature range	-55°C to +125°C						
Shock	MIL-STD-883C, Method 2002, Condition B						
Solderability	MIL-STD-883C, Method 2003						
Seal integrity	MIL-STD-883C, Method 1014, Condition C & A2						
Vibration	MIL-STD-883C, Method 2007, Condition A						
Marking	MIL-STD-202F, Method 215						

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Ordering Information

TCXO1811BE_Sine	-	10MHz	-	x	x	x
Group				01	02	03

For example, TCXO1811BE_Sine-10MHz-1-1-2 denotes the TCXO has the following specifications:

Temperature Range: 0°C to +50°C
Stability Over Temperature: ±0.5ppm
Supply Voltage: 5V
Frequency: 10MHz

01	**Temperature Range**
Code	Specification
1	0°C to +50°C
2	-10°C to +60°C
3	-20°C to +70°C
4	-30°C to +75°C
5	-40°C to +80°C
6	-40°C to +85°C

02	**Stability**
Code	Specification
1	±0.5ppm
2	±1.0ppm
3	±1.5ppm
4	±2.0ppm
5	±2.5ppm
6	±3.0ppm
7	±3.5ppm
8	±5.0ppm

03	**Supply Voltage**
Code	Specification
1	3.3V
2	5V