



Features

Stability: ± 2.5 ppm over -40°C to $+85^{\circ}\text{C}$

100 MHz : Sine wave : 3 dBm min

5V supply ; 20 mA max.

± 8 ppm EFC (0.5V to 4.5V)

Phase Noise :

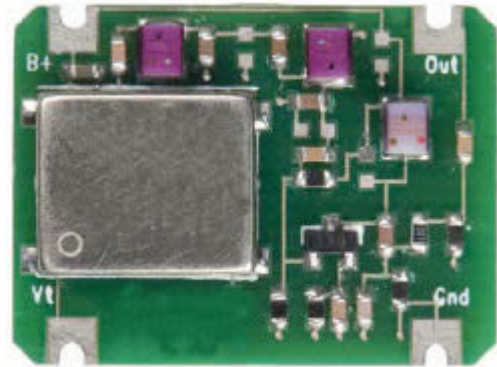
-140 dBc/Hz typ. at 1KHz

-147 dBc/Hz typ. at 10KHz

19.05 mm x 25.40 mm smd

Open pcb construction

Picture of Part



Typical Application

Synthesizer Reference

Test Instruments

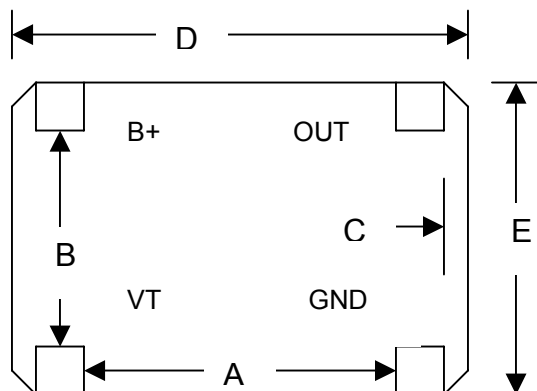
Microwave Communications LO

Weather Radar

Description

The TCXOBEIM-100MHz-B_Rev2 device offers a value-added modular design utilizing a 50 MHz 9x11 mm VCTCXO module followed by a low noise 2X doubler circuit to derive 100 MHz output frequency ; excellent frequency stability; and low phase noise performance based on analog compensation.

Physical Dimensions & Pin Connections



4 pads .10" square

A = 0.65"

B = 0.55"

C = 0.075"

D = 1.0"

E = 0.75"

Do not immerse in solvents



Specification

#	TCXO Specification	Sym.	Condition	Value			Unit	Included in the test data
				Min.	Typ.	Max.		
1.1	Nominal Frequency	Fo		100.000000			MHz	
1.2			+25°C +/- 5°C	-250.0		+250.0	ppb	Vc : 2.5V
RF output								
2.1	Wave form			Sine wave				
2.2	Output Power			3.0			dBm	
2.3	Harmonics		Sub harmonics -45 dBc			-25	dBc	harmonics
2.4	Load				50		Ohms	
Frequency control								
3.1								
3.2	Control voltage range	Vc		0.5	2.5	4.5	V	
3.3								
3.4	Slope			Positive				
3.5	Pull range			+/- 8.0			PPM	
3.6								
Power supply								
4.1	Voltage	Vcc		4.75	5	5.25	V	
4.2								
4.3	DC Current					20	mA	
Frequency stability								
5.1	vs. temperature		From -40°C to +85°C	-2.500		+2.500	ppm	
5.2			Includes voltage and load variation					
6	Aging	per year	after 30 days of operation at time of shipment			+/- 1.0	ppm	
7.1	SSB Phase Noise		at 1 Hz offset				dBc/Hz	
			at 10 Hz offset			-85		
			at 100 Hz offset			-120		
			at 1 kHz offset			-140		
			at 10 kHz offset			-147		
7.2								
Maximum ratings, environmental, mechanical conditions.								
Operating temperature range		-40°C to +85°C						
Storage temperature range		-50°C to +100°C						