



Dynamic Engineers Inc.

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TCXOBEIM-100MHz-B Low Noise Sine Out
19.05 mm x 25.40 mm Open SMD No Cover

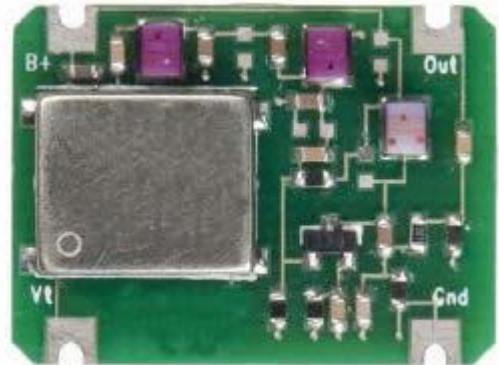
Features

Stability: ± 2.0 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 1 KHz
-147 dBc/Hz typ. at 10 KHz
19.05 mm x 25.40 mm smd
Open pcb construction

Picture of Part



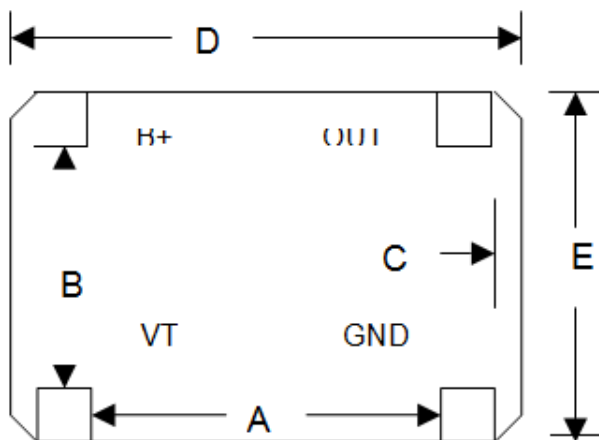
Description

The TCXOBEIM-100MHz-B 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.

Typical Applications

- Synthesizer Reference
- Test Instruments
- Microwave Communications LO
- Weather Radar

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



Specifications

TCXO Specification	Sym.	Condition	Value			Unit	Included in the test data
			Min.	Typ.	Max.		
Nominal Frequency	Fo		100.000000			MHz	
		+25°C +/- 5°C	-250.0		+250.0	ppb	Vc : 2.5V
RF output							
Wave form			Sine wave				
Output Power			3.0			dBm	
Harmonics		Sub harmonics -45 dBc			-25	dBc	harmonics
Load				50		Ohms	
Frequency control							
Control voltage range	Vc		0.5	2.5	4.5	V	
Slope			Positive				
Pull range			+/- 8.0			ppm	
Power supply							
Voltage	Vcc		4.75	5	5.25	V	
DC Current					20	mA	
Frequency stability							
vs. temperature		From -40°C to +85°C Includes voltage and load variation	-2.000		+2.000	ppm	
Aging	Per Year	after 30 days of operation at time of shipment			+/- 1.0	ppm	
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		
Maximum ratings, environmental, mechanical conditions.							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-50°C to +100°C					