TCXOBE-002-100MHz
Low Noise sine out
13.2 x 20.8 x 10.0 mm DIP package

Features

Stability: ± 2.0 ppm over - 40°C to +65°C
100 MHz: Sine wave: 3 dBm min
Phase Noise :
-135dBc/Hz or better at 1KHz
-145dBc/Hz or better at 10KHz
13.2 mm x 20.8 mm x 10.0 mm
Hermetically Sealed Package

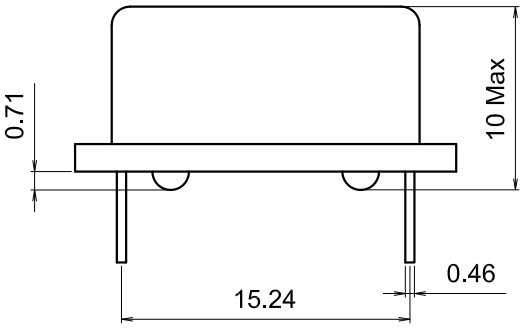
Typical Applications

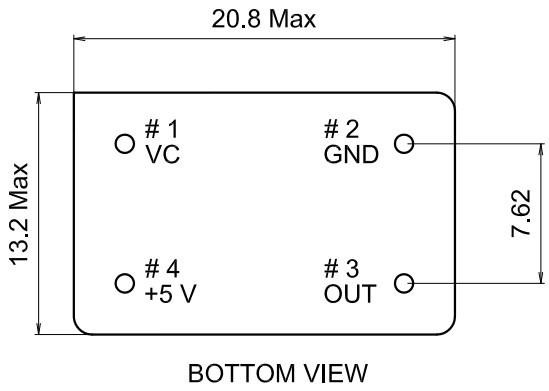
Synthesizer Reference
Test Instruments
Microwave Communications LO
Weather Radar

Description

The TCXOBE-002-100MHz device offers excellent frequency stability and low phase noise performance based on analog compensation techniques and suitable for harsh environments in a hermetically sealed package.

Mechanical Drawing and PIN Function





TCXOBE-002-100MHz
Low Noise sine out
13.2 x 20.8 x 10.0 mm DIP package

Specifications

#	TCXO Specification	Sym.	Condition	Value Min.	Value Typ.	Value Max.	Unit	Included in the test data
1.1	**Nominal Frequency**	Fo			100.000000		MHz	
1.2			+25 ℃ +/- 5 ℃	-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	V_c		0.0	2.5	5.0	V	
3.3								
3.4	Slope				Positive			
3.5	Pull range			+/- 10.0			PPM	
3.6								
	Power supply							
4.1	Voltage	Vcc		4.75	5	5.25	V	
4.2								
4.3	DC Current					30	mA	
	Frequency stability							
5.1	vs. temperature		From -40 ℃ to +65 ℃	-2.000		+2.000	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					
			at 100 Hz offset			-115		
			at 1 kHz offset			-135		
			at 10 kHz offset			-145		
7.2								

Maximum ratings, environmental, mechanical conditions.

Operating temperature range	-40 ℃ to +65 ℃
Storage temperature range	-55 ℃ to +95 ℃