Features and Benefits

+/- 5.0 PPM over -40°C to +85°C
100MHz, +3 dBm sine wave output
+/- 10 PPM electronic frequency adjust
Less than -135dBc/Hz @ 1KHz offset
Less than -145dBc/Hz @ 10KHz offset

Typical Applications

Synthesizer Local Oscillator Reference
LO for Weather Radar

Description

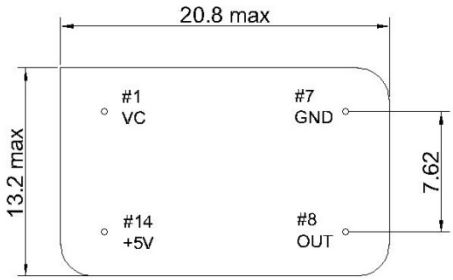
This product utilizes a low noise 50 MHz TCXO module followed by a low noise 2X doubler to deliver a 100 MHz output.

Mechanical Drawing & Pin Connections

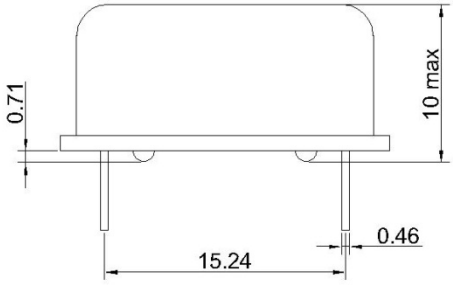
Drawing No: MD150026-1

Top View:

Bottom View:



Side View:



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F_{nom}			100		MHz	
Output Wave Form				Sine wave			
Output Load				50		Ohm	
Output Level			+3			dBm	
Power Supply							
Supply Voltage	V_{cc}		4.75	5.0	5.25	V	
Supply Current		At maximum supply voltage			30	mA	
Frequency Control*							
Control Voltage Range	V_c		0		5	V	
Tuning Range			+/-10			ppm	
Frequency Stability							
VS. Temperature		From -40°C to +85°C (Includes load and voltage changes of +/-10%)			+/-5.0	ppm	
Aging		Per year Average vs.10 years			+/-1.0	ppm	
Phase Noise (typ.)		100 Hz		-115		dBc/Hz	
		1 KHz		-135			
		10 KHz		-145			
Environmental Conditions							
Parameter	**Reference Std.**						
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +95°C						
Package	13.2x20.8x10 mm 14/4 DIL						
Solder Heat	IEC68-2-20A 260+/-15°C for 10+/-1sec						