



Features and Benefits

Frequency range: 40-150MHz

Supply voltage: 3.3V

Steady current: 35mA Max

Output waveform: CMOS

Holdover: ± 0.32 PPM

Phase noise@10KHz: -148dBc/Hz

Operating temperature: -40°C to +85°C

Size: 14.5x9.6x6.5mm

Typical Applications

Time Synchronization

Microwave Communication

Test & Measurement

Telecom Systems

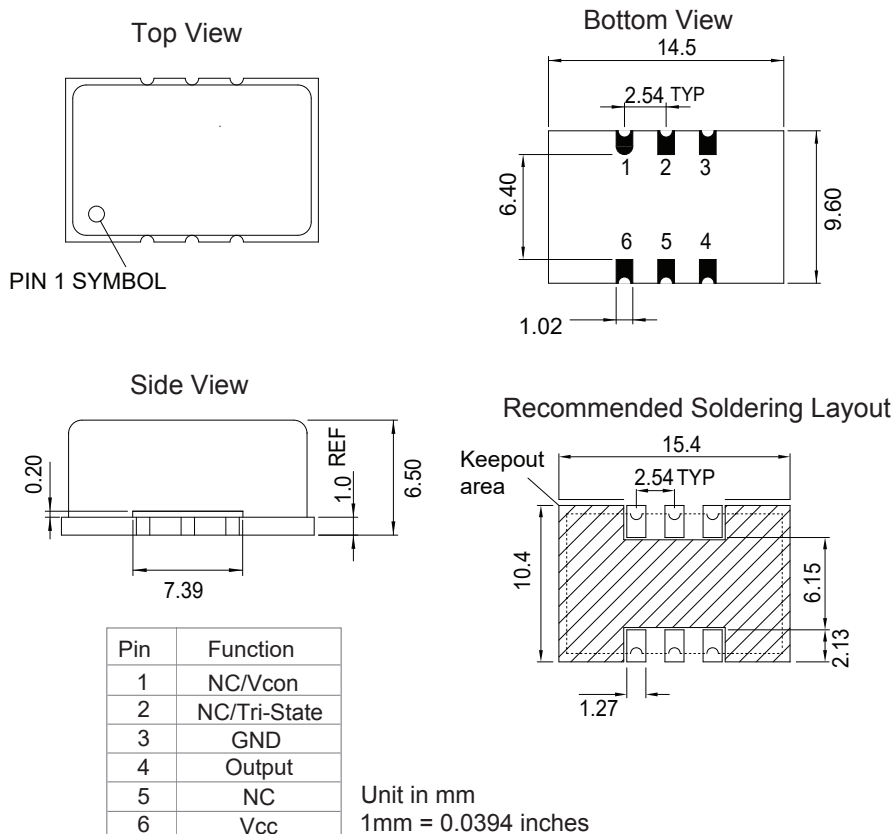
Satellite Communication

Description

TCXO914BM-STR3 is the high stability stratum3 TCXO. The Holdover can be less than ± 0.32 PPM. It can be widely used in the portable communication devise.

Mechanical Drawing & Pin Connections

Drawing No: MD220035-1



**Specifications**

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f ₀	Standard Frequency: 50M, 92.16M, 98.304M, 100M, 120MHz	40		150	MHz	
RF Output							
Output Waveform			CMOS				
Load				15		pF	
Output Level High			2.97			V	
Output Level Low					0.33	V	
Duty Cycle			45		55	%	
Rise/Fall Time					3	nSec	
Power Supply							
Voltage	V _{cc}			3.3		V	
Current		At maximum supply voltage			35	mA	
Frequency Stability							
Overall					±4.6	ppm	Note1
Holdover		Over 24 Hours			±0.32	ppm	
Initial Tolerance		At 25°C			±1.0	ppm	
Phase Noise		@10Hz			-87	dBc/Hz	
		@100Hz			-117		
		@1KHz			-141		
		@10KHz			-148		
		@100KHz			-155		
		@1MHz			-160		
Environmental Conditions							
Operating temperature range		-40°C to +85°C					
Storage temperature range		-40°C to +105 °C					
Vibration Test		MIL-STD-883 2007 Condition A, JESD22-B103 Condition 1. 10~2000Hz, 1.52mm, 20G, each axis for 4hrs					
Thermal Shock		MIL-STD-883 1010 Condition B, JESD22-A104 Condition B. -55°C, 125°C; soak time is 10 mins, with total 200 cycles					
Mechanical Shock		MIL-STD-883 2002 Condition B, JESD22-B104 Condition B. 1500G, half-sine, 0.5ms, each axis for 3 times					

Note1: Frequency stability includes frequency tolerance@25°C and frequency stability vs. operating temperature range and voltage variance and 20 years aging.