



Features and Benefits

High frequency stability(up to $\pm 0.3\text{ppm}$ over -40°C to $+85^\circ\text{C}$)
Sinewave Output
SMD Miniature package

Typical Applications

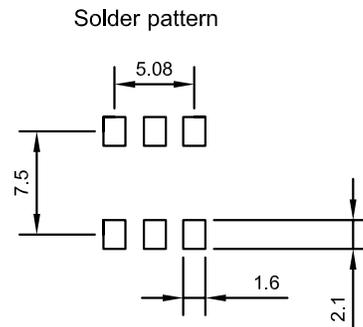
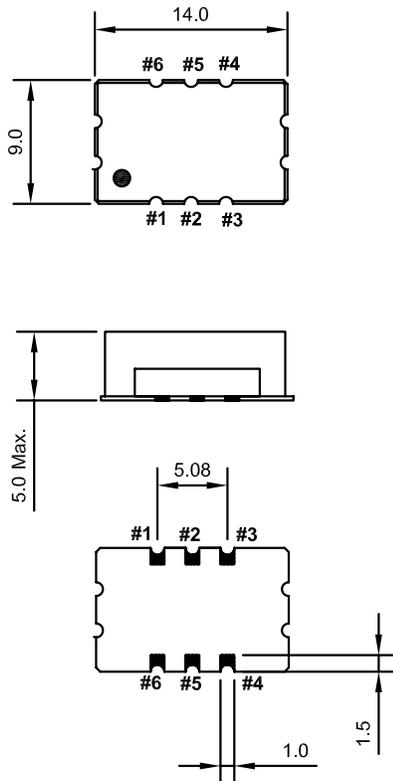
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description

TCXO914Z-28.8MHz-A-V offers wide temperature operation from -40°C to $+85^\circ\text{C}$ with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: MD150098-2



Pin Connections:

- #1. Vc (Voltage Control)
- #2. N.C.
- #3. GND
- #4. RF Output
- #5. N.C.
- #6. Vdc

Unit in mm

1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F _{nom}			28.8000		MHz	
Sinewave	Output Level		3			dBm	
	Output Load			50		ohm	
Power Supply							
Voltage	V _{cc}			3.30		V	
Current Consumption					7.0	mA	
Frequency Control*							
Control voltage range	V _c		0.5		2.5	V	
Tuning range			-5		+5	ppm	Tuning Slope Positive
Frequency Slope		Over operating temperature			0.05	ppm/°C	
Frequency Stability							
Versus temperature		-40°C to 85°C, ref to (fmax+fmin)/2	-0.3		+0.3	ppm	
Tolerance at 25°C			0		+1.0	ppm	
Versus ±5% change in supply voltage		Ref to frequency at nominal supply	-0.1		+0.1	ppm	
Versus ±10% change in load		Ref to frequency at nominal load	-0.1		+0.1	ppm	
First Year Aging			-1.0		+1.0	ppm	
Over 10 Years Aging			-4.0		+4.0	ppm	
Phase noise (typ.) @28.8MHz		10Hz		-85		dBc/Hz	
		100 Hz		-120			
		1000 Hz		-140			
		10 KHz		-150			
		100 KHz		-155			
Short-Term Stability	ADEV	Tau = 1 second			1.0	E-10	
Environmental Conditions							
Operating temperature range		-40°C to 85°C					
Storage temperature range		-55°C to 105°C					
Reflow profiles		≤260°C over 10sec Max as per IPC/JEDEC J-STD-020C					
Moisture sensitivity		Level 1(unlimited)					

Specifications

