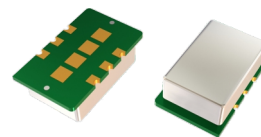


14.3 x 8.7mm SMD Voltage Controlled Temperature Compensated Crystal Oscillator

Feature

- Typical 14.3 x 8.7 x 4.9 mm
- Metal cover, FR-4 PCB based.
- Output: TTL/CMOS or Clipped Sine Wave
- Low current option (2mA for Clipped Sine Wave o/p)
- VCTCXO available



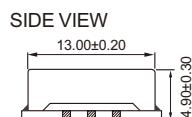
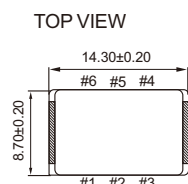
Electrical Specifications

Parameter		3.3/3.0		5.0V		Unit
		Min.	Max.	Min.	Max.	
Supply Voltage Variation		V _{DD} -5%	V _{DD} +5%	V _{DD} -5%	V _{DD} +5%	V
Frequency Range		5	40	5	40	MHz
Standard Frequency (for CMOS)		5, 6.4 ,8 , 8.192, 10, 12.5, 12.8, 16, 16.384, 19.44, 20, 25				MHz
Standard Frequency (for Clipped Sine)		8.192, 10, 12.5, 12.8, 16, 16.384, 19.44, 20, 25				MHz
Frequency Tolerance*		-	±2.0	-	±2.0	ppm
Frequency stability	VS Supply V(±5%) change	-	±0.2	-	±0.2	ppm
	VS Load(±10%) change	-	±0.2	-	±0.2	
	VS Aging(@1 st year)	-	±1.0	-	±1.0	
Supply Current(Clipped Sine)		-	3.5	-	3.5	mA
Supply Current(CMOS)		-	6	-	6	mA
Clipped sine wave	Output Level	0.8	-	0.8	-	V _{P-P}
	Load	10kΩ//10pF		10kΩ//10pF		
CMOS	Output High	0.9V _{DD}	-	0.9V _{DD}	-	V
	Output Low	-	0.1V _{DD}	-	0.1V _{DD}	V
	Load	15		15		pF
	Duty	45	55	45	55	%
Control Voltage Range(VCTCXO)		0.5	2.5	0.5	2.5	V
Pulling Range (VCTCXO)		±5	-	±5	-	ppm
Vc Input Impedance(VCTCXO)		100	-	100	-	kΩ
Phase Noise @12.8MHz	100Hz	-120		-120		dBc/Hz
	1KHz	-140		-140		
	10KHz	-148		-148		
Start Time		-	2	-	2	mSec
Tri-State(option)	Disable	-	0.99	-	1.5	V
	Enable	2.31	-	3.5	-	V
Storage Temp. Range		-55	125	-55	125	°C

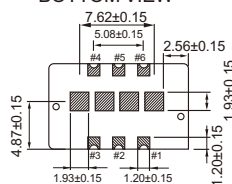
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position

* Frequency at 25°C, 1 hour after reflow.

Dimension(mm)

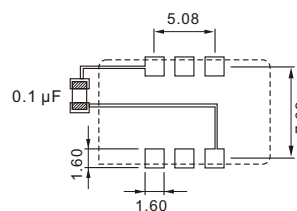


BOTTOM VIEW



PIN#	Function
1	V _{DD} :VC-TCXO GND/NC:TCXO
2	Tri-State / NC
3	GND & Case
4	Output
5	NC
6	VDD

Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1 μF as close to the part as possible between V_{DD} and GND pads.

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C) \ ppm	±0.05	±0.1	±0.14	±0.2	±0.28	±0.37	±0.5
-10 ~ +60	o	o	o	o	o	o	o
-20 ~ +70	o	o	o	o	o	o	o
-40 ~ +85	X	X	X	Δ	o	o	o

o: Available Δ: Conditional X: Not available