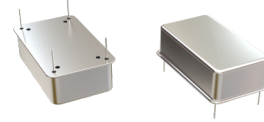


20.4 x12.8mm DIP Voltage Controlled Temperature Compensated Crystal Oscillator

Feature

- Typical 20.4 x12.8 x 7.8 mm
- Hermetically Sealed 14 PIN DIP Package
- Double sealed metal case and high reliability
- VCTCXO available



Electrical Specifications

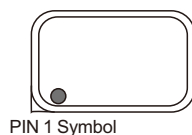
Parameter		Clipped Sine Wave				CMOS				Unit
		3.3V		2.8V		3.3V		2.8V		
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation(V _{DD}) ±5%		3.135	3.465	2.66	2.94	3.135	3.465	2.66	2.94	V
Frequency Range		10	52	10	52	1.25	52	1.25	52	MHz
Frequency Tolerance*		-	±2.0	-	±2.0	-	±2.0	-	±2.0	ppm
Frequency stability	VS Supply V(±5%) change	-	±0.2	-	±0.2	-	±0.2	-	±0.2	ppm
	VS Load(±10%) change	-	±0.2	-	±0.2	-	±0.2	-	±0.2	
	VS Aging(@1 st year)	-	±1.0	-	±1.0	-	±1.0	-	±1.0	
Supply Current	10MHz ≡ FO<15MHz	-	2.0	-	2.0	Only for clipped sine wave				mA
	15 MHz ≡ FO<26MHz	-	3.0	-	3.0					
	26 MHz ≡ FO<52MHz	-	4.0	-	4.0					
Output Level		0.8	-	0.8	-					V _{p-p}
Supply Current	1.25MHz ≡ FO<10MHz	Only for CMOS				-	10	-	7	mA
	10MHz ≡ FO<15MHz					-	15	-	10	
	15 MHz ≡ FO<26MHz					-	20	-	15	
	26 MHz ≡ FO<52MHz					-	25	-	20	
CMOS	Output High					0.9V _{dd}	-	0.9V _{dd}	-	V
	Output Low					-	0.1V _{dd}	-	0.1V _{dd}	V
	Duty					40	60	40	60	%
Control Voltage Range(V _{CTCXO})		0.5	2.5	0.5	2.5	0.5	2.5	0.5	2.5	V
Pulling Range (V _{CTCXO})		±5		±5		±5		±5	-	ppm
V _c Input Impedance(V _{CTCXO})		100	-	100	-	100	-	100	-	kΩ
Phase Noise @13MHz	100Hz	-115		-115		-115		-120		dBc/Hz
	1KHz	-135		-135		-135		-140		
	10KHz	-148		-148		-148		-148		
Start Time		-	2	-	2	-	2	-	2	mSec
Storage Temp. Range		-55	125	-55	125	-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.

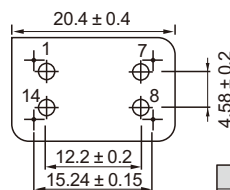
Dimension(mm)

TOP VIEW

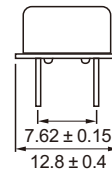
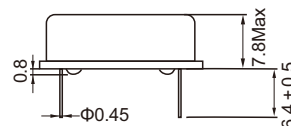


PIN 1 Symbol

BOTTOM VIEW



SIDE VIEW



Recommended soldering pattern

PIN#	Function
1	Vcon / NC
7	GND
8	Output
14	VDD

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm			
	Clipped sine wave		CMOS	
	±0.5	±1.0	±0.5	±1.0
-20 ~ +70	○	○	○	○
-40 ~ +85	△	○	△	○

○: Available △: Conditional X: Not available

" Pulling Range < 10 ppm available