

TN Type Voltage Controlled Temperature Compensated Crystal Oscillator

RoHS Compliant Standard

preliminary



FEATURE

1. Typical 19 x 19 x 8.4mm SMD package.
2. Tight symmetry (45 to 55 %) available(Square or Sine Wave).
3. High Frequency Low Noise.

ORDERING INFORMATION

T	N	C	G	A	L	W	-	N	F	-	?
TCXO	Package (mm)	Supply Voltage (V)	Pulling Range (ppm)	Freq. Stability (ppm)	Temp. Range(°C)	Output Logic and Symmetry	Dash	Appearance	Lead Free	Dash	Freq. (MHz)
	19x19	C: 5V E: 3.3V	E: ±5 G: ±3 T: TCXO	A: ±0.5 B: ±1.0 P: ±1.5	I: -10 ~ +60 C: -20 ~ +70 D: -30 ~ +85 L: -40 ~ +85	J: CMOS15pF,50 ±5% F: CMOS 50pF,50 ±5% W: Sine Wave @10KΩ//10pF		N:Normal	F:RoHS Compliant		xx.xxxxxx

Ordering Example: TNCGALW-NF-10.000000 MHZ

VCTCXO TN-TYPE; V_{DD}: 5V; Pulling Range: ±3; Freq. Stability: ±0.5; Temp. Range: -40°C to +85°C. Sine Wave; Normal Appearance; RoHS Compliant; Freq. 10.000000MHz.

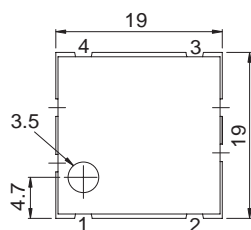
FREQ.STABILITY vs. TEMP.RANGE

Temp.(°C)	ppm	A: ±0.5	B: ±1.0
I	-10 ~ +60	○	○
C	-20 ~ +70	○	○
L	-40 ~ +85	○	○

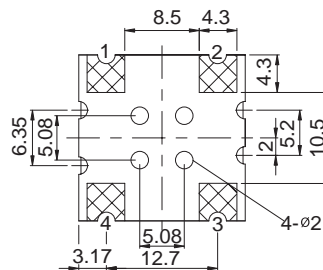
○:Standard △:Available(case by case) X : Not available

OUTLINE DRAWING

[TOP VIEW]

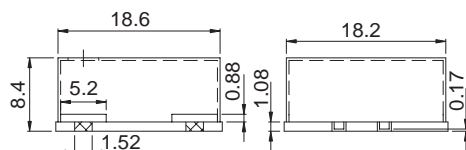


[BOTTOM VIEW]



Pin	Function
#1	N/C
#2	GND
#3	RF OUT
#4	V _{DD}

[SIDE VIEW]



UNIT:mm

VCTCXO

ELECTRICAL SPECIFICATION

Parameter	Min.		Max.		Unit
	5.0	3.3	5.0	3.3	
Supply Voltage Variation(V _{DD}) 5%	4.75	3.14	5.25	3.46	V
Frequency Range	10.000		105.000		MHz
Operating Temp. Range	Refer to Ordering Information				°C
Frequency Stability	Refer to Ordering Information				ppm
Frequency Stability					
Vs Aging (First Year)	—		± 1.0		ppm
Vs Aging (Ten Year)	—		± 3.0		
Supply Current					
10.000MHz , (V _{DD} =3.3V)	4.5		—		mA
105.000MHz , (V _{DD} =5V)	—		60		
Output type (≥ 35MHz)	Sine or Square				
Output type (< 35MHz)	Square Wave				
Square Terminating Load	10KΩ/10pF				
Phase Noise					
10Hz	-70			dbc/Hz	
100Hz	-115				
1KHz	-135				
10KHz	-145				
100KHz	-150				
AFC (Voltage Control Range for VCTCXO)	Refer to Ordering Information				ppm
Storage Temp. Range	-55		125		°C