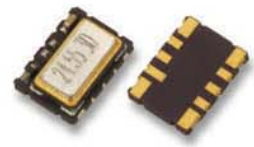
TAITIEN

TC Type Voltage Controlled Temperature Compensated Crystal Oscillator

RoHS Compliant Standard

FEATURE

1. Typical 7.0 x 5.0 x 1.85 mm ceramic SMD package.
2. For automatic assembly.
3. Compactness and light weight.
4. Low power consumption.
5. VCTCXO available.
6. Packing: Tape & Reel, 1000/3000 pcs per Reel.



Actual Size

ORDERING INFORMATION

T	C	C	A	D	C	S	A	N	F	_	?
TCXO	Package (mm)	Supply Voltage (V)	Pulling Range (ppm)	Freq. Stability (ppm)	Temp. Range (°C)	Output Logic and Symmetry	Oscillator Mode	Appearance	Lead Free	Dash	Freq. (MHz)
	7 x 5	C: 5 E: 2.8~3.3	A: ±5 B: ±8 C: ±10 T: TCXO	A: ±0.5 B: ±1.0 P: ±1.5 C: ±2.0 D: ±2.5 E: ±3.0 F: ±4.0 G: ±5.0	B: 0~+55 I: -10~+60 C: -20~+70 D: -30~+85 L: -40~+85	S: Clipped Sine Wave @10KΩ // 10pF	-A: AT Fundamental *Not Selectable by Customer	N: Normal	F: RoHS Compliant		XX.XXXXXX

Ordering Example: TCCADCSANF-10.000000 MHz

VCTCXO C-TYPE; V_{DD}: 5V; Pulling Range: ±5ppm; Freq. Stability: ±2.5ppm; Temp. Range: -20°C to +70°C; Clipped Sine Wave; AT Fundamental; Normal Appearance; Lead Free; Freq. 10.000000MHz..

Not all combinations of options are available.

FREQ. STABILITY vs. TEMP. RANGE

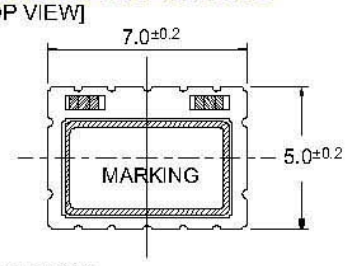
Temp.(°C) \ ppm		A: ±0.5	B: ±1.0
B	0 ~ +55	○	○
I	-10 ~ +60	○	○
C	-20 ~ +70	○	○
D	-30 ~ +85	△	○
L	-40 ~ +85	△"	○

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

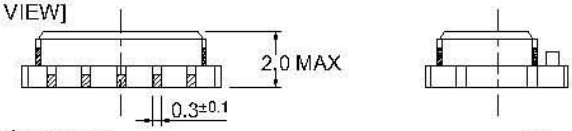
" 10~26MHz and Pulling < ±8 ppm available

OUTLINE DRAWING

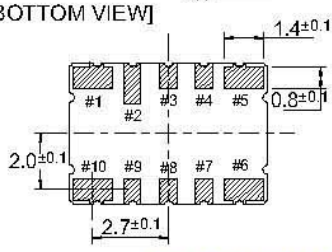
[TOP VIEW]

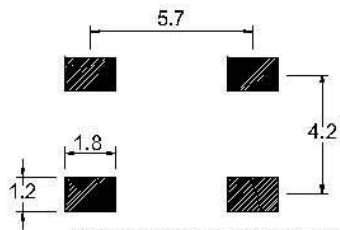


[SIDE VIEW]



[BOTTOM VIEW]





Recommended Soldering Pattern

Pin	Function
#1	VCON : VCTCXO GND : TCXO
#2	NC
#3	NC
#4	NC
#5	GND
#6	Output
#7	NC
#8	NC
#9	NC
#10	V_{DD}

VCTCXO / TCXO

ELECTRICAL SPECIFICATION

Parameter	Min.		Max.		Unit
	5.0	2.8	5.0	2.8	V
Supply Voltage Variation(V_{DD}) 5%	4.75	2.66	5.25	2.94	V
Frequency Range	10		40*		MHz
Operating Temp. Range	Refer to Ordering Information				°C
Frequency Stability *	Refer to Ordering Information				ppm
Frequency Stability					
Vs Supply Voltage (±5%) change	–		±0.2		ppm
Vs Load (±10%) change	–		±0.2		
Vs Aging	–		±1.0		ppm / year
Supply Current					
10.000MHz ≦ Fo < 15.000MHz	–		1.5		mA
15.000MHz ≦ Fo < 26.000MHz	–		2.0		
26.000MHz ≦ Fo ≦ 40.000MHz	–		2.5		
Output Level (Clipped Sine)	0.8		–		Vp-p
Load	10KΩ//10pF				
Vc Input Impedance	1.0		–		MΩ
Phase Noise @13.0MHz					
100Hz	-115				dBc/Hz
1KHz	-135				
10KHz	-148				
Start Time	–		2		mSec
Storage Temp. Range	-55		125		°C

* 26.000 ~ 40.000 MHz only for V_{DD} = 2.8 ~ 3.3V.
*Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.