TCXO

5.4 TC3225

3.2 x 2.5 mm SMD Voltage Controlled Temperature VCTCXO Compensated Crystal Oscillator

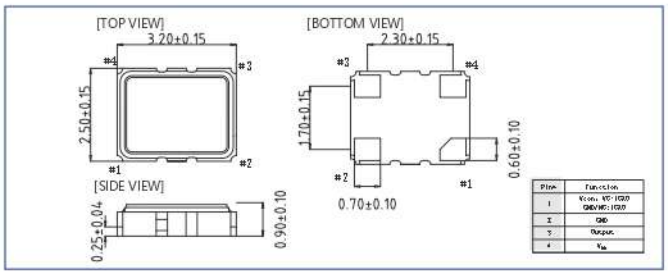
FEATURES

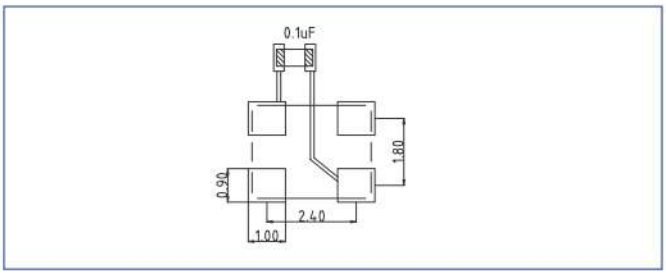
- Typical 3.2 x 2.5 x 0.9 mm SMD
- Compactness and lightweight
- VCTCXO available
- For automatic assembly
- Low power consumption
- Low thickness

TYPICAL APPLICATION

- GPS
- WiMAX, WLAN
- Mobile Phone

DIMENSIONS





ELECTRICAL SPECIFICATION

Parameter		3.3/3.0/2.8V		2.5V		1.8V		Unit
		Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD)		2.66	3.465	2.375	2.625	1.71	1.89	V
Frequency Range		10	52	10	52	10	52	MHz
Standard Frequency		10, 12.8, 13, 16.367667, 16.368, 16.369, 19.2 19.44, 20, 25, 26, 27, 30, 30.72, 32, 38.4						MHz
Frequency Tolerance*		—	±2.0	—	±2.0	—	±2.0	ppm
Frequency stability	Vs Supply Voltage (±5%) change	—	±0.2	—	±0.2	—	±0.2	ppm
	Vs Load (±10%) change	—	±0.2	—	±0.2	—	±0.2	
	Vs Aging (@1st year)	—	±1.0	—	±1.0	—	±1.0	ppm
Supply Current	10 MHz ≤ F_O ≤ 26 MHz	—	1.5	—	1.5	—	1.5	mA
	26 MHz < F_O ≤ 52 MHz	—	2.0	—	2.0	—	2.0	
Output Level (Clipped sine wave)		0.8	—	0.8	—	0.8	—	Vp-p
Load		10KΩ // 10pF		10KΩ // 10pF		10KΩ // 10pF		
Control Voltage Range (VCTCXO)		0.5	2.5	0.4	2.4	0.3	1.5	V
Pulling Range (VCTCXO)		±5.0	—	±5.0	—	±5.0	—	ppm
Vc Input Impedance (VCTCXO)		500	—	500	—	500	—	KΩ
Phase Noise @ 19.2 MHz	100 Hz	-115		-115		-115		dBc/Hz
	1 KHz	-135		-135		-135		
	10 KHz	-148		-148		-148		
Start time		—	2	—	2	—	2	mSec
Storage Temp. Range		-40	85	-40	85	-40	85	°C

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C) \ ppm	±0.5	±1.0	±1.5	±2.0	±2.5
-20 ~ +70	○	○	○	○	○
-30 ~ +85	○	○	○	○	○
-40 ~ +85	○	○	○	○	○

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.

*o: Available Δ: Condition X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.
Specifications subject to change without notice.