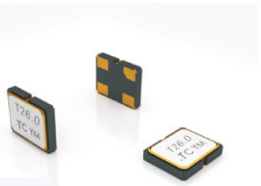
5.4 TC3225

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



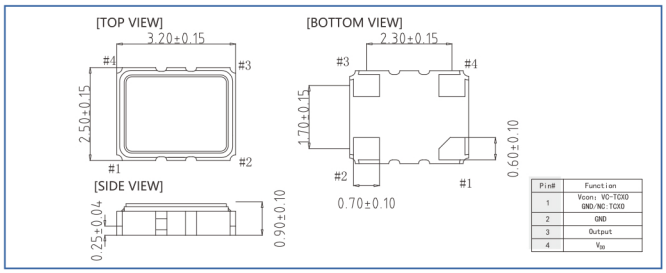
FEATURES

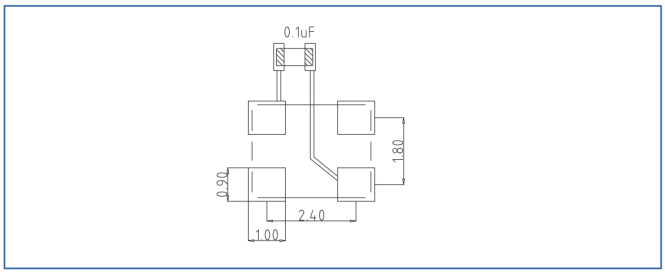
- Typical 3.2 x 2.5 x 0.9 mm SMD
- Compactness and lightweight
- VCTCXO available
- For automatic assembly
- Low power consumption
- Low thickness

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						
Frequency Tolerance (at 25°C)		—	±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	±15.0	±5.0	±15.0	±5.0	±15.0	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		-55	125	-55	125	-55	125	°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.