

# VC3 Series

## 3.2\*2.5 mm SMD VCTCXO



### FEATURE

- Typical 3.2 x 2.5 x 0.9 mm ceramic SMD package
- For automatic assembly
- Compactness and light weight
- Low power consumption
- VCTCXO available
- Low thickness

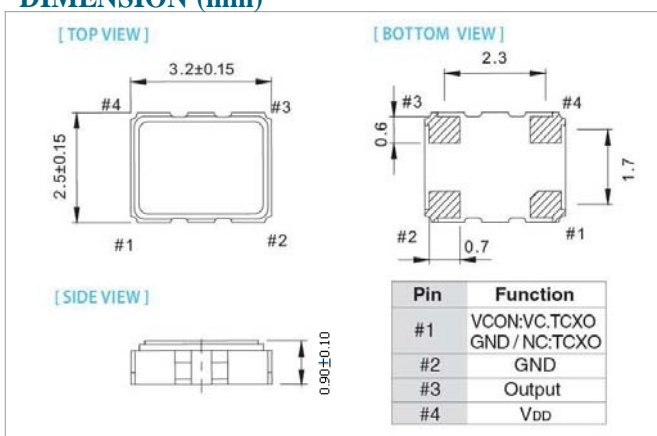


### TYPICAL APPLICATION

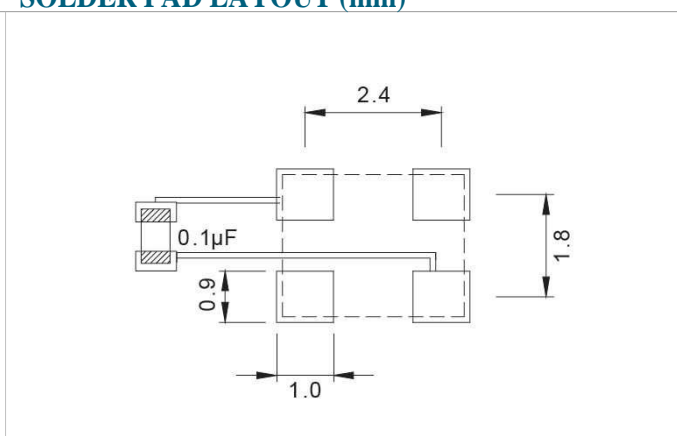
- GPS
- WLAN / WiMAX
- Mobile Phone

**RoHS Compliant Standard**

### DIMENSION (mm)



### SOLDER PAD LAYOUT (mm)



### ELECTRICAL SPECIFICATION

Parameter	3.0V		2.5V		1.8V		Unit
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 5%	2.85	3.15	2.375	2.625	1.71	1.89	V
Frequency Range	10	52	10	52	10	52	MHz
Standard Frequency	12.8, 16.367667, 16.368, 16.369, 19.2, 20, 26, 40						
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	ppm
Vs Aging (@ 1 <sup>st</sup> year)	-	±1.0	-	±1.0	-	±1.0	ppm
Supply Current	10 MHz ≤ F <sub>0</sub> < 26		-		-		
	-	2.0	-	2.0	-	2.0	mA
	26 MHz ≤ F <sub>0</sub> ≤ 52		-		-		
	-	2.5	-	2.5	-	2.5	mA
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		
	1 KHz		-135		-135		dBc/Hz
	10 KHz		-148		-148		
Start Time	-	2	-	2	-	2	mSec
Storage Temp. Range	-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

Packing: Tape & Reel 3000 pcs per Reel

### FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±0.5	±1.0	±1.5	±2.0	±2.5
0~+55	○	○	○	○	○
-10~+60	○	○	○	○	○
-20~+70	○	○	○	○	○
-30~+85	△	○	○	○	○
-40~+85	△	△	○	○	○

\* ○: Available    △: Conditional    X: Not available