

TCXO

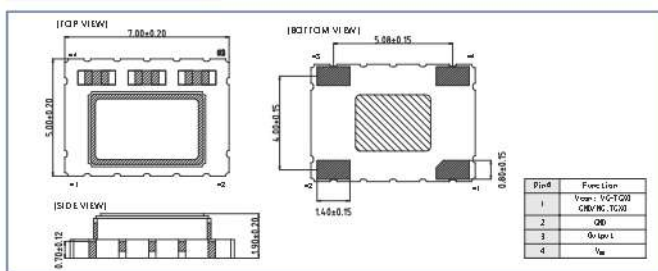
5.8 TC7050S

7.0 x 5.0 mm SMD Voltage Controlled
Temperature Compensated Crystal Oscillator

FEATURES

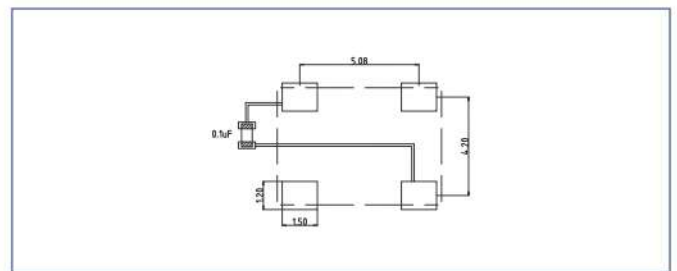
- Typical 7.0 x 5.0 x 1.9 mm ceramic SMD package
- High Precision for -40 ~ +85°C, ± 0.28 ppm,
-40 ~ +105°C, ± 2 ppm
- CMOS and Clipped Sine wave (without DC-cut capacitor) output optional

DIMENSIONS



TYPICAL APPLICATION

- Stratum 3
- Femtocell, Base Stations



ELECTRICAL SPECIFICATION

Parameter		5.0V		3.3V		Unit
		Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD)		Vdd-5%	Vdd+5%	Vdd-5%	Vdd+5%	V
Frequency Range		5	52	5	52	MHz
Standard Frequency(for COMS)		10, 12.8, 16.384, 19.2, 19.44, 20, 25, 26				
Operating Temp. Range		-20 ~ 70				°C
		-40 ~ 85				
Frequency Stability (Overall, 20 Years)*		—	±4.6	—	±4.6	ppm
Frequency Stability Vs Temp. Range (Ref. to (FMAX+Fmin)/2)		—	±0.14 (-20 ~ +70°C)	—	±0.14 (-20 ~ +70°C)	ppm
			±0.28 (-40 ~ +85°C)		±0.28 (-40 ~ +85°C)	
Holdover Stability +		—	±0.32	—	±0.32	ppm
Supply Current(CMOS output)		—	6	—	6	mA
Output Level (Clipped sine wave)		—	3.5	—	3.5	
Output Level(CMOS)	Output High	90%Vdd	—	90%Vdd	—	V
	Output Low	—	10%Vdd	—	10%Vdd	
	Duty	45	55	45	55	%
Output Level(Clipped sine)		0.8	—	0.8	—	Vp-p
Load(CMOS)		15pF		15pF		pF
Load(Clipped sine)		10KΩ // 10pF		10KΩ // 10pF		
Control Voltage Range(VCTCXO)		0.5	2.5	0.5	2.5	V
Pulling Range(VCTCXO)		±5.0	—	±5.0	—	ppm
Vc Input Impedance		100	—	100	—	KΩ
Phase Noise @ 10 MHz	100 Hz	-130		-130		dBc/Hz
	1 KHz	-145		-145		
	10 KHz	-154		-154		
Start time		—	2	—	2	mSec
Storage Temp. Range		-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

* Including calibration @ 25°C, supply voltage VDD $\pm 5\%$, load $\pm 10\%$, reflow soldering, 20 years aging and frequency stability over temperature.

+ Including 24 hours aging, supply voltage VDD $\pm 5\%$ and frequency stability over temperature.

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