

TL Type for Stratum 3

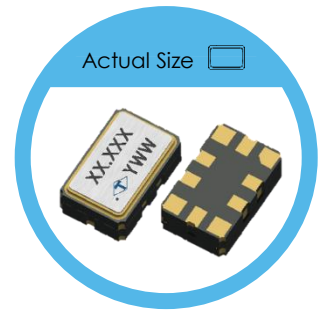
5.0 x 3.2 mm SMD Voltage Controlled Temperature Compensated Crystal Oscillator

FEATURES

- Typical 5.0 x 3.2 x 1.85 mm ceramic SMD package.
- Stratum 3 (Overall ± 4.6 ppm including 20 years aging.)
- CMOS and Clipped Sine wave (without DC-cut capacitor) output optional.

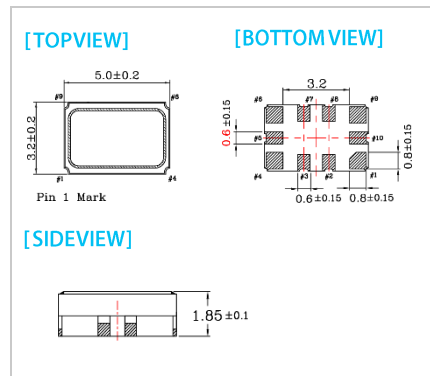
TYPICAL APPLICATION

- Stratum 3
- Femtocell, Base Stations

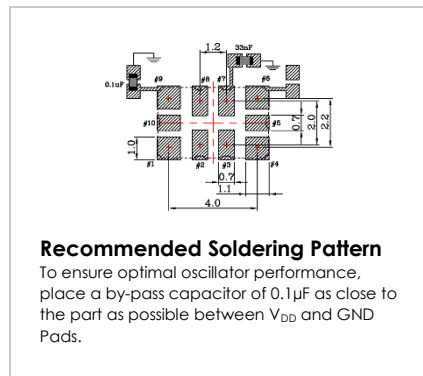


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



PIN FUNCTION (mm)

PIN#	FUNCTION
1	V _{CON} :VC-TCXO
2	Do not Connect
3	Do not Connect
4	GND
5	Tri-State
6	Fout
7	VC Filter
8	NC
9	V _{DD}
10	GND

ELECTRICAL SPECIFICATION

Parameter		2.5V / 3.3V				Test Condition
		Min.	Typ.	Max.	Unit	
Supply Voltage Variation (V _{DD})		V _{DD} - 5%		V _{DD} + 5%	V	
Frequency Range		5		52	MHz	
Standard Frequency		10, 12.8, 16.384, 19.2, 20, 25, 26				Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
Operating Temp. Range		-20 ~ +70, -40 ~ +85				°C
Frequency Stability (Overall, 20 Years)				±4.6	ppm	Including calibration @ 25°C, supply voltage V _{DD} ±5%, load ±10%, reflow soldering, 20 years aging and frequency stability over temperature.
Frequency Stability Vs Temp. Range				±0.1 (-20~+70°C) ±0.2 (-40~+85°C)	ppm	Ref. to (F _{MAX} +F _{MIN})/2
Holdover Stability				0.37	ppm	Including 24hours aging, supply voltage V _{DD} ±5% and frequency stability over temperature.
Supply Current	CMOS			7.5	mA	
	Clipped Sine Wave			5	mA	
Output Level	CMOS	Output High (Logic "1")	90%V _{DD}		V	
		Output Low (Logic "0")		10%V _{DD}	V	
	Clipped Sine Wave	Duty	45	55	%	
			0.8		Vp-p	
Load	CMOS		15pF			
	Clipped Sine Wave		10 KΩ // 10pF			
Phase Noise @ 10MHz		@ 100Hz		-125	dBc/Hz	Please add filter capacitor as suggested, and 33nF at pin7
		@ 1kHz		-145	dBc/Hz	
		@ 10kHz		-154	dBc/Hz	
G Sensitivity			0.5	1.0	ppb/G	Each Axis, 20-2000Hz
Start Time				5	mSec	
Storage Temp. Range		-55		+125	°C	
VCTCXO	Control Voltage Range	0.5		2.5	V	
	Pulling Range	±5.0			ppm	
	Vc Input Impedance	100			kΩ	

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