

## Features

Stability:  $\pm 0.5$  PPM over  $-40^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$   
Phase Noise :  
-140 dBc/Hz typ.@ 1 KHz offset  
50 MHz HCMOS output  
3.3V  
11.4 mm x 9.6 mm SMD

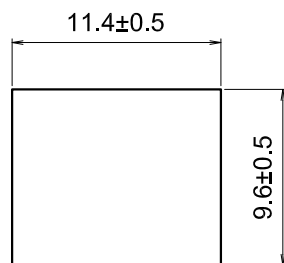
## Typical Applications

Synthesizer Reference  
GPS Timing Modules  
Microwave Communications

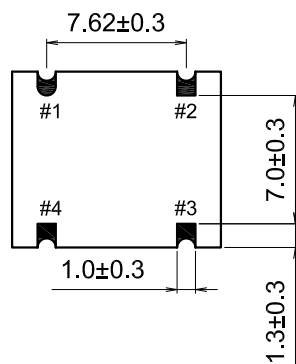
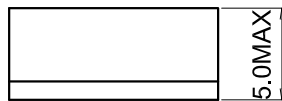
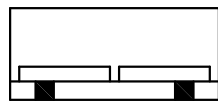
## Description

The GSTX1211 device at 50 MHz operating frequency offers excellent frequency stability and low phase noise performance.

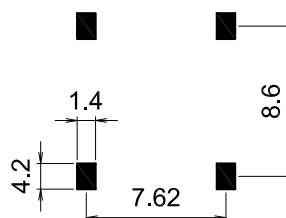
## Mechanical Drawing and PIN Connections



PIN CONNECTION  
#1 N.C or V.C  
#2 GND  
#3 OUTPUT  
#4 Vcc



Recommended Soldering Pattern



## Specification

#	TCXO Specification	Sym.	Condition	Value			Unit	Included in the test data
				Min.	Typ.	Max.		
1.1	<b>Nominal Frequency</b>	F <sub>0</sub>		50.000000			MHz	
1.2	Tol. ( ≤ 90 days of datecode )		+25 °C +/- 5 °C	-1.0		+1.0	ppm	24 hrs after reflow
<b>RF output</b>								
2.1	Wave form			Square wave				
2.2	Output Level High			0.9*V <sub>s</sub>			V	
2.3	Output Level Low					0.1*V <sub>s</sub>	V	
2.4	Load				15		pF	
<b>Frequency control</b>								
3.1	N/A							
3.2								
3.3								
3.4								
3.5								
3.6								
<b>Power supply</b>								
4.1	Voltage	V <sub>cc</sub>		3.15	3.30	3.45	V	
4.2								
4.3	DC Current					15	mA	
<b>Frequency stability</b>								
5.1	Vs. temperature		from -40 °C to 70 °C	-0.500		+0.500	ppm	
5.2	Vs. 5% voltage change			-0.200		+0.200	ppm	
6	<b>Aging</b>	per year	after 30 days of operation at time of shipment			+/- 1.0	ppm	
7.1	<b>SSB Phase Noise ( @ 50 MHz )</b>		at 1 Hz offset				dBc/Hz	
			at 10 Hz offset					
			at 100 Hz offset					
			at 1 kHz offset		-140			
			at 10 kHz offset					
7.2								
<b>Maximum ratings, environmental, mechanical conditions.</b>								
	Operating temperature range		-40 °C to +70 °C					
	Storage temperature range		-45 °C to +90 °C					