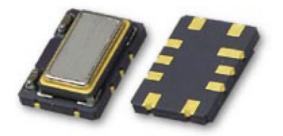
Features

Frequency Range 5 to 26 MHz 7mm x 5mm x 1.85mm ceramic SMD +/- 4.6 ppm total stability over 20 years CMOS or clipped sine wave options Tri-state Enable / Disable Function +/- 0.37 ppm from -40 to +85 centigrade degree +/- 0.28 ppm from -20 to +70 centigrade degree

Picture of Part



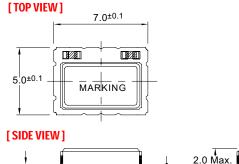
Typical Applications

Base stations 10 G-bit ethernet SONET GSM,CDMA, 3G, and 4G cellular

Description

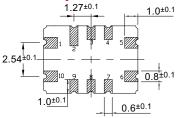
The GSTX1205 family offers low noise compensation techniques combined with aggressive conditioning processes resulting in outstanding long term stability, tightly distributed performance parameters, and superior long term reliability

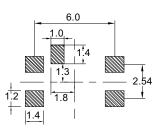
Physical Dimensions











Recommended Soldering Pattern

Pin Connections

Pad	Function					
1	VCON : VC-TCXO					
1	NC : TCXO					
2	NC					
3	NC NC GND					
4						
5						
6	CMOS/ Clipped					
0	Sinewave Output					
7	NC					
8	NC					
9	Tri-State Control*					
10	Vdd					

Specification

TCXO Specification Operational Frequency Range		Sym. Condition	Value			Unit	Note		
			Min. 5	Min.	Typ.	Max.	MHz		
				5		26			
	-							-	
	Load					15	pF		
	H - level voltage	V _H		0.9Vcc			V		
	L - level voltage	VL				0.1Vcc	V		
	Rise & Fall time						ns		
	Duty cycle			45		55	%		
Clipped Sine-wave	Level	L		0.8			pk-pk		
	Load Resistance	RL			10		Kohm		
ONLY	Load Capacitance	CL			10		pF		
				I					
Power supp	lv		l	L				L.	
Voltage	-J	Vcc		3.135	3.300	3.465	V	5.0 V option available	
Current con	sumption	Icc				6.0	mA	square wave	
	I.					3.5		clipped sine wave	
Frequency of	control*		1			1		l	
Control voltage range		Vc		0.5	1.5	2.5	V	Positive tuning slope	
				0.5	1.5	2.3	•	Positive tuning slope	
Tuning range				+/- 5			ppm		
Vc Input Impedance						100	Kohm		
						100	Romm		
Frequency s	stability							-	
vs. temperature			-40°C to +85°C, ref 25°C	-0.370		+0.370	ppm		
vs. 5% change in supply voltage			ref Vcc typ.	-0.300		+0.300	ppm		
Tolerance at 25C				-2.000		+2.000	ppm	Frequency 1 hr after reflow	
SSB Phase noise @12.8 MHz CMOS typical Tri-state Enable / Disable			100 Hz		-120		dBc/Hz		
			1000 Hz	_	-140				
			10 kHz		-148				
			Output OFF			0.3Vcc			
			Output ON	0.7Vcc					
Total	Over 20 years		Projected after	-4.600		+4.600	ppm	See NOTE 1 on Page 3	
Tolerance			30 days operation						
Environmen	ntal, mechanical conc	litions.							
Operating temperature range		-40°C to +85°C maximum range available that is standard							
Storage temperature range			-55°C to +125°C						
N 1 ' 1	1 1								
Mechanical s	SNOCK								
Vibration Soldering									
Soluering									

Ordering Information

GSTX1205-XX.XXXXXX-W-Y-Z

- 1. Field "XX. XXXXXX " is the Output Frequency to six decimals in MHz
- 2. Field "W" is Operating Temperature Range and Freq. Stability :
 - a. "0" for -20°C to +70°C and +/- 0.280 ppm
 - b. "1" for -40°C to +85°C and +/- 0.370 ppm
 - c. "2" for -40°C to +85°C and +/- 0.28 ppm
 - d. "3" for -40 °C to +85 °C and +/-1 ppm

***NOT all choices in section 2 available : Must consult factory for specific frequency and stability combination.

- 3. Field "Y" is Power Supply Option :
 - a. "0" for 5V +/- 5%
 - b. "1" for 3.3V +/- 5%
- 4. Field " Z " is Output Waveform Option :
 - a. "0" for clipped sine wave
 - b. "1" for cmos square wave

Part Number Example

GSTX1205-10.000000-1-1-1 10.000000 MHz Operating Frequency Operating Temperature of -40 °C to +85 °C +/- 0.370 ppm Frequency Stabilit y 3.3 volt supply cmos output

NOTE 1 : Total Frequency Tolerance is inclusive of calibration at 25 °C, change over temperature, change with 5% supply variation, change with 5% load change, change with reflow soldering, and 20 year aging.