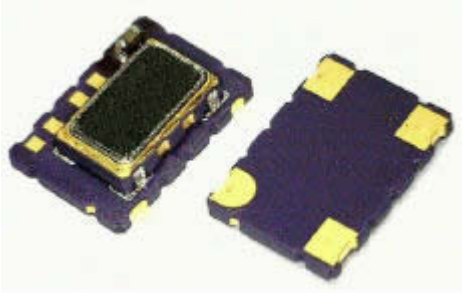
GSTX1202
155.52 MHz SMD TCXO

Features

Wide Frequency Range 1.6 to 156 MHz
And 32.768 KHz Frequency available
7mm x 5mm x 2.5mm ceramic SMD
Compact and lightweight

Picture of Part



Typical Applications

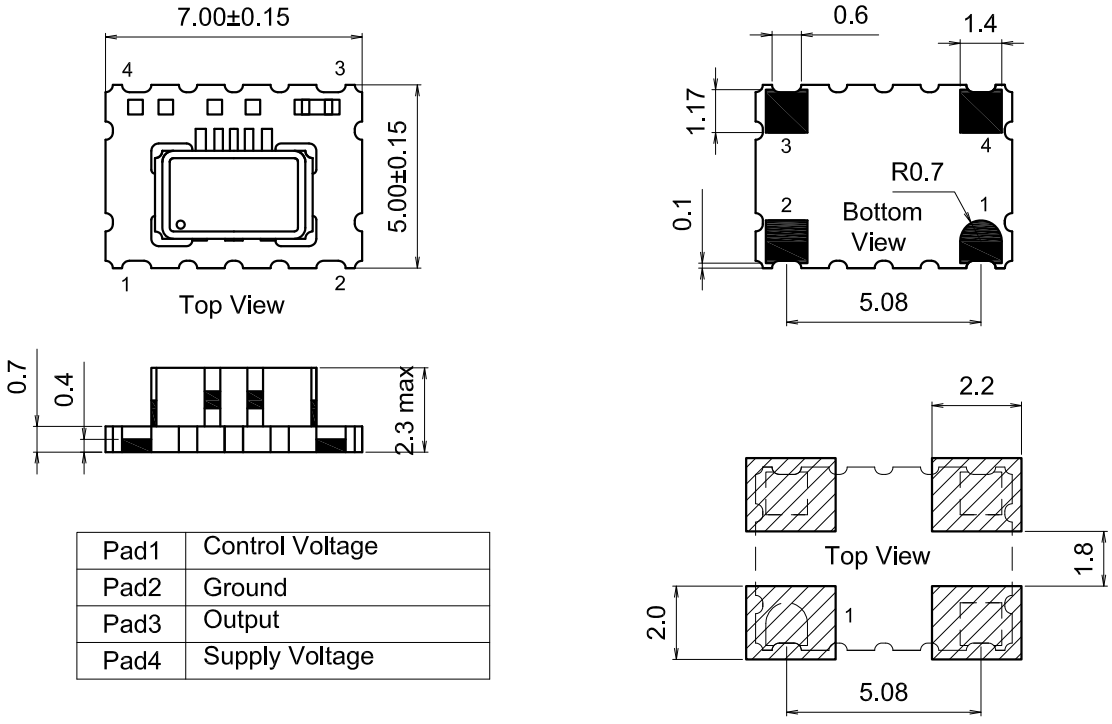
Wireless / Satellite Communications
WLAN / WiMAX / WIFI
SONET / SDH / ATM

Description

The GSTX1202 family offers a wide operating frequency range for a wide variety of applications. It's internal design allows for the same long term stability across the entire frequency band.

Physical Dimensions & Suggested Land Pattern

Unit:mm



Pad1	Control Voltage
Pad2	Ground
Pad3	Output
Pad4	Supply Voltage

Rounded pad is pad No.1.Count counter-clockwise when looking at top view.
Count clockwise when looking at bottom view.Decoupling capacitor is not built-in.

Specification

TCXO Specification		Sym.	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		f_0		1.6		156.0	MHz	
LVCMOS	Load					15	pF	
	H - level voltage	V_H		2.2			V	
	L - level voltage	V_L				0.4	V	
	Rise & Fall time		10% to 90%			8	ns	
	Duty cycle			45		55	%	
Standard Frequencies Partial List			10.0, 12.8, 13.0,14.4,15.36					** Standard means crystals
			16.384, 19.2, 19.44, 19.68, 20 25.0					Already designed for these
			38.88, 40.0, 77.76, 125, 155.52					Frequencies
Power supply								
Voltage		Vcc		3.135	3.300	3.465	V	
Current consumption		Icc				15 30	mA	For 20 MHz or less At 125 MHz
Frequency control*								
Control voltage range		Vc		0.5	1.5	2.5	V	Positive tuning slope
Tuning range				+/- 5			ppm	
Tuning Linearity						10	%	
Frequency stability								
vs. temperature			-40°C to +85°C, ref 25°C	-1.0		+1.0	ppm	
vs. 5% change in supply voltage			ref Vcc typ.	-0.300		+0.300	ppm	
Tolerance at 25C				-2.0		+2.0	ppm	Frequency 24 hrs after reflow
SSB Phase noise @ 10 MHz CMOS Typical			10 Hz		-93		dBc/Hz	
			100 Hz		-117			
			1 kHz		-137			
			10 kHz		-144			
			100 kHz		-144			
Aging	Per Year		Projected yearly aging after 30 days operation	-1.0		+1.0	ppm	
Environmental, mechanical conditions.								
Operating temperature range			**-40°C to +85°C maximum range available that is standard**					
Storage temperature range			**-55°C to 125°C**					
Mechanical shock			MIL-STD 202F ; Method 213b ; Test Condition E ;1000 GG's half sine wave					
Vibration			MIL-STD 202F ; Method 204 ; 35G ; 50 to 2000 Hz					

Ordering Information

GSTX1202-XX.XXXXXX-W

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 +/- 1.000 ppm
   b. " 1 " for -30°C to +75°C and +/- 1.000 ppm
   c. " 2 " for -30°C to +85°C and +/- 1.000 ppm
   d. " 3 " for -40°C to +85°C and +/- 1.500 ppm
   e. " 4 " for -40°C to +85°C and +/- 2.000 ppm

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

Part Number Example

GSTX1202-10.000000-3
10.000000 MHz Operating Frequency
Operating Temperature of -40°C to +85°C
+/- 1.500 ppm Frequency Stability

Performance Graph

Phase Noise