

Description: TCXO

Nominal Freq.: 9.6 MHz

DEI P/N: GSTX1220-9.6MHz-A

Revision: 01

Date: 2012.05.18

Approved / Date	Checked / Date	Prepared / Date
Greg/2012.05.18	David/2012.05.18	Sophie/2012.05.18

Customer: _____

Customer P/N: N/A

Features

9.600 MHz Operating Frequency
Better than +/- 0.150 ppm at 20C +/- 3C
Better than +/- 0.250 ppm from -40C to 70C
Smooth sine wave output
25.2 mm x 15.2 mm x 5.6 mm SMD Package
Electrical and Mechanical Frequency Adjust
Very Good Phase Noise

Picture of Part



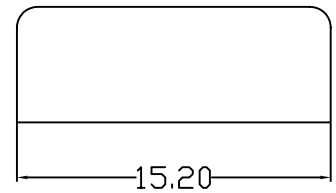
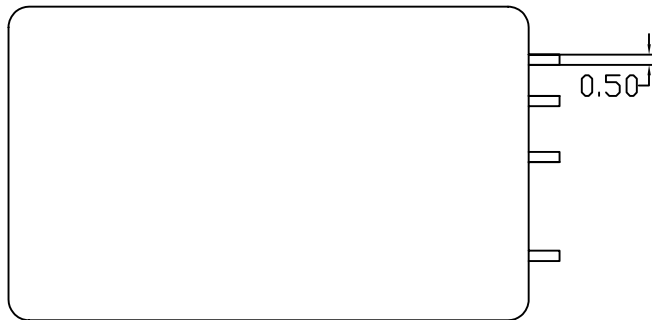
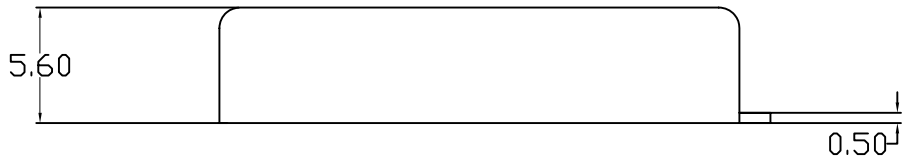
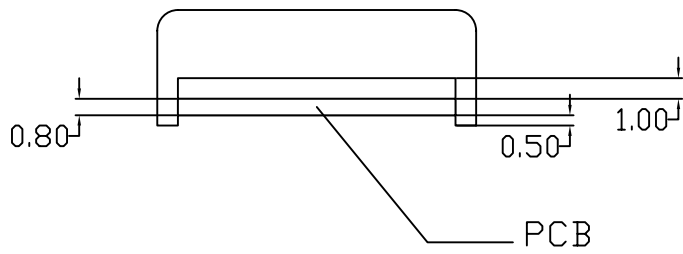
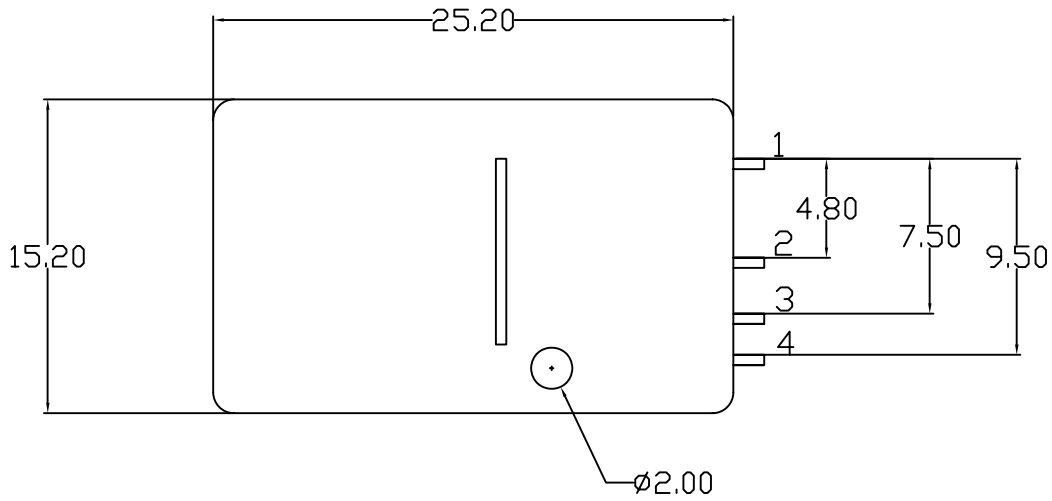
Typical Applications

Test Instrumentation
Microwave Communications
Mobile Radio

Description

The GSTX1220-9.6MHz-A platform is an integrated module design incorporating the latest low noise analog compensation technology onto a custom SMD package including both electronic and mechanical frequency adjustment for ease of processing.

Mechanical Drawing and PIN Function



Specifications

GSTX1220-9.6MHz-A		Sym.	Condition	Value			Unit	Note	
				Min.	Typ.	Max.			
Operational Frequency Range		f ₀		9.600000			MHz		
Sine Wave 300 ohm Load	Load			300			Ohms		
	Output Level			2.0			V pk-pk		
	Harmonics		2 nd harmonic			-22		dBc	
			3 rd and 4 th harmonic			-48		dBc	
		5 th and 6 th harmonic			-58		dBc		
Power Supply				4.75	5.00	5.25	Volts		
			DC Current Consumption			8	mA		
Frequency Tolerance (@ 20C +/- 3C with Vcontrol = 2.25 volts AFTER Mechanical Frequency Adjustment in customer board)									
				-0.150		+0.150	PPM		
Electronic Frequency Mechanical Trimmer		Vcontrol from 0.25 to 4.50 volts		+/- 3.0 +/- 1.5			PPM	With Vcontrol = 2.25V center	
Frequency vs. Voltage and Load		5% supply + Load Variation		+/- 0.100			PPM	Load from 50 ohm to 1M ohm	
Frequency stability									
vs. temperature		From -40C to 70C with REF. to Freq. at 20C +/- 3C		-0.250		+0.250	PPM	With Vcontrol = 2.25 volts	
vs. temperature		From 10C to 50C with REF. to Freq. at 20C +/- 3C		-0.200		+0.200	PPM	With Vcontrol = 2.25 volts	
vs. temperature		From 70C to 75C with REF. to Freq. at 20C +/- 3C		-0.350		+0.350	PPM	With Vcontrol = 2.25 volts	
First year Aging		As calculated by curve fit based		-0.300		+0.300	PPM		
Five Year Aging		On 30 days of continuous power		-0.800		+0.800	PPM		
SSB Phase noise At 9.6 MHz sine wave				Low	Typical	Best	dBc/Hz		
		100 Hz		-120	-122	-125			
		1000 Hz		-135	-138	-141			
		10000 Hz		-145	-148	-151			
		100000 Hz		-148	-150	-155			
Environmental									
Parameter	Reference Std.			Test Condition					
Vibration Test	MIL-STD-883 2007 Condition A JESD22-B103 Condition 1			10~2000Hz, 1.52mm, 20G, each axis for 4 hrs					
Thermal Shock	MIL-STD-883 1010 Condition B JESD22-A104 Condition B			-55°C, 125°C; soak time is 10 mins, with total 200 cycles					
Mechanical Shock	MIL-STD-883 2002 Condition B JESD22-B104 Condition B			1500G, half-sine, 0.5ms, each axis for 3 times.					
Storage temperature				-55°C to +85°C					