

GSVX1205

8-800 MHz 14.4 x 9.5 mm

Ultra-low Noise PECL Outputs

Features

8 to 800 MHz Frequency Range
Phase jitter (0.1 to 0.25 pico-seconds)
PECL Outputs
3.3V supply

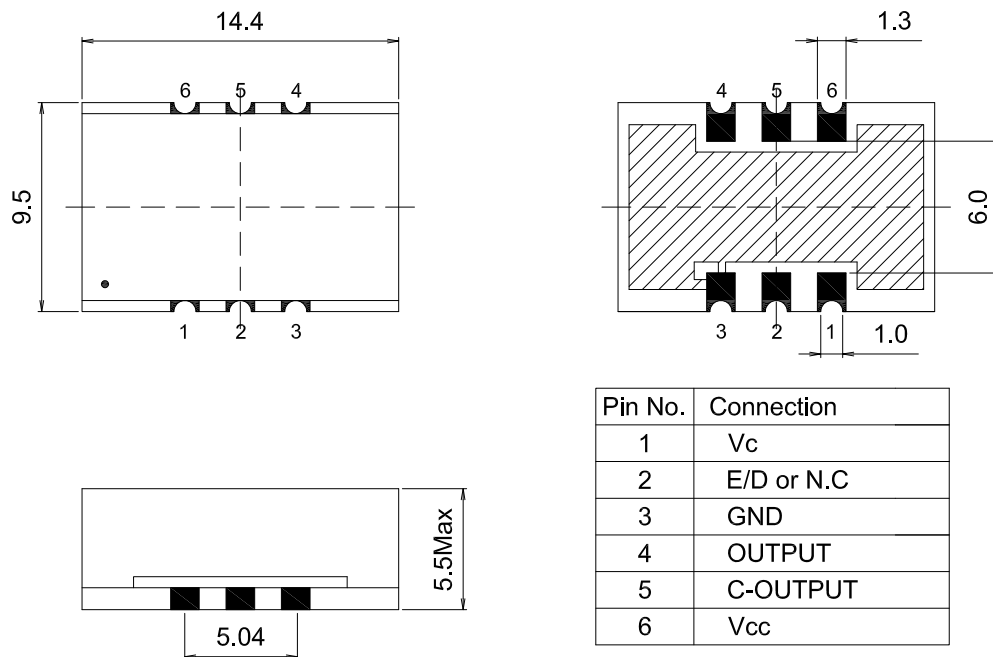
Typical Applications

Broadband Access
SONET / SDH / ATM
10 Gigabit Ethernet, Fiber Channel

Description

The GSVX1205 family offers ultra-low jitter PECL outputs required to minimize bit error rates in high frequency data / voice networks.

Mechanical Drawing and PIN Connections



GSVX1205

8-800 MHz 14.4 x 9.5 mm

Ultra-low Noise PECL Outputs

Specification

VCXO Specification		Sym.	Condition	Value			Unit	
				Min.	Typ.	Max.		
Operational Frequency Range		f_0		8		800	MHz	*Not all freq. available above 500 MHz ; consult factory
LVPECL	Load		50 ohm to Vcc -2.0V					
	H - level voltage	V_H				Vcc-1.025	V	
	L - level voltage	V_L				Vcc-1.62	V	
	Rise & Fall time		20% to 80%			2.0	ns	
	Duty Cycle			40	50	60	%	50 +/- 5% option
Frequency Tolerance			@ 25C and Vcon = 1.65V	+/- 10		+/- 20	ppm	
Frequency Stability			-40 C to +85 C, Ref 25C			+/-50	ppm	Other Options Available
DC Supply Voltage				3.15	3.30	3.45	V	
DC Supply Current					80	200	mA	Dependent upon operating frequency
Frequency stability vs. temperature			-40 °C to +85 °C, ref 25C	-50		+50	ppm	Other options available
Frequency Pull Range				+/-100			ppm	Standard
Voltage Control Range				0.3	1.65	3.00	V	
Linearity						10	%	
PECL / @ 500 MHz	100 Hz offset					-99	dBc/Hz	
	1000 Hz					-121		
	10 KHz					-138		
	100 KHz					-138		
	1 MHz					-140		
Phase Jitter (12KHz to 20 MHz)			@ 500 MHz			0.205	Pico-secs	
Enable	Pin 2		Pin 2 as NO CONNECT	2.8			V	RF Outputs Enabled
Disable			Is Enable by default			0.4	V	RF Outputs disabled
Environmental, mechanical conditions.								
Operating temperature range		-40 °C to +85 °C maximum range available						
Storage temperature range		-40 °C to 85 °C						

Ordering Information

GSVX1205 - XXX.XXX - W

1. Field " XXX.XXX " is the Output Frequency to three decimals in MHz
2. Field " W " is Operating Temperature Range and Freq. Stability:
 - a. " 0 " for 0°C to +70°C and +/- 20 ppm
 - b. " 1 " for 0°C to +70°C and +/- 25 ppm
 - c. " 2 " for -40°C to +85°C and +/- 25 ppm
 - d. " 3 " for -40°C to +85°C and +/- 50 ppm

*** NOTE : Inclusive of 25C tolerance, drift over temperature, aging ,
Variation with load and voltage, shock, vibration, and reflow .

Part Number Example

GSVX1205-500.000 -3

500 MHz Operating Frequency

Operating Temperature of -40°C to +85°C

+/- 50 ppm Frequency Stability

PECL Outputs