PROGRAMMABLE CRYSTAL OSCILLATOR

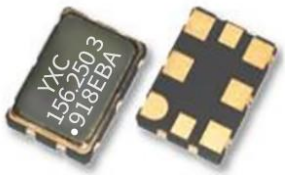
YSV221PJ VCXO

Applications

- 10 GB Ethernet, SONET, SATA, SAS, Fibre Channel

Features

- Freq range:10MHz-1500MHz.
- Output PECL, LVDS, HCSL, CML.
- Package Size: 5.0*3.2 7.0*5.0mm.
- Ultra-low RMS phase jitter.

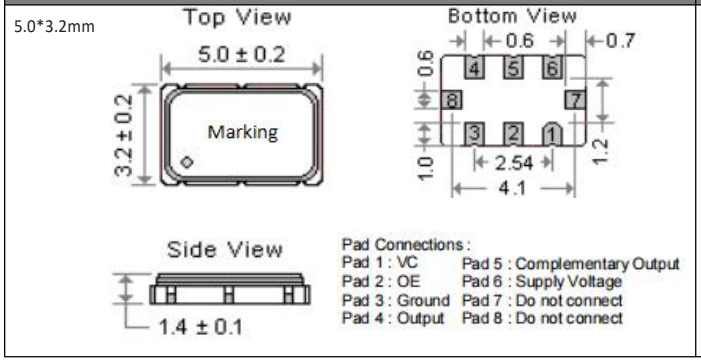


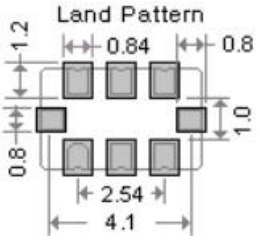
Specifications

Item/Type SMD VCXO	PECL	LVDS	HCSL	CML
Output Frequency Range	15MHZ~2100MHZ	15MHZ~2100MHZ	15MHZ~700MHZ	15MHZ~2100MHZ
Supply Voltage	2.5V, 3.3V	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V
Total Stability	±25ppm, ±50ppm, ±100ppm or specify			
Absolute Pull Range	±100ppm (min), ± 200 ppm (available)			
Operating Temperature Range	-40~+85℃,or specify			
Storage Temperature Range	-55~+125℃			
Input Impedance	5 Mohms (min)			
Current Consumption(VDD = + 3.3 V)	100 mA (typ.), 120 mA (max.)	75 mA (typ.), 90 mA (max.)	80 mA (typ.), 100 mA (max.)	70 mA (typ.), 85 mA (max.)
Output Voltage Swing	595 mV (min.) 930 mV (max.)	250 mV (min.), 450 mV (max.)	450 mV(min.), 700 mV (typ.)	200 mV (min.), 600 mV (typ.)
Output Load	50 Ω into VDD - 2V or Thevenin equivalent	100 Ω between OUT and OUTN	50 Ω to GND	50 Ω to VDD
Duty Cycle	45~55%			
Rise Time/Fall Time(20% to 80% Waveform)	0.4 nsec (max.)			
Start-up time	5 msec. (typ.) ; 10 msec. (max.)			
Aging	± 3 ppm (max.) for first year ; ± 2 ppm (max.) per year thereafter			
RMS Jitter [12 kHz ~ 20 MHz]	156.250 MHz : 159 fsec (typ.) ; 491.520 MHz : 155 fsec (typ.) ; 644.530 MHz : 151 fsec (typ.) ; 2,000 MHz : 163 fsec(typ.)			

Dimensions and Patterns [unit:mm]

Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)





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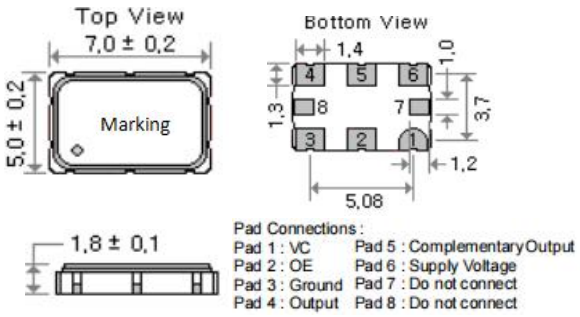
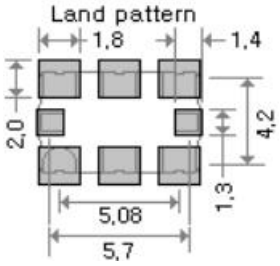
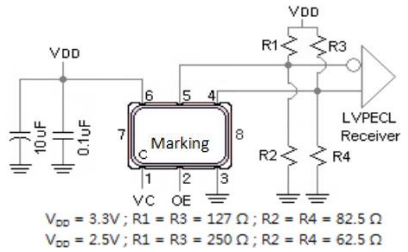
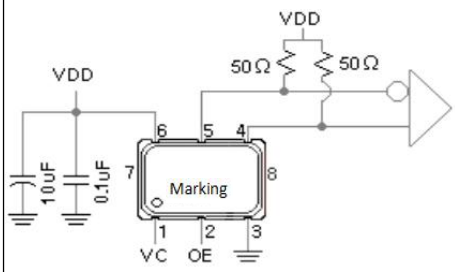
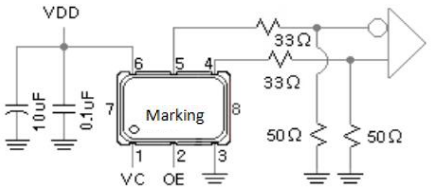
7.0*5.0mm





Test Circuit

PECL	CML	HCSL
		

LVDS Test Circuits for 2.5V and 3.3V	LVDS Test Circuits for 1.8V only