PROGRAMMABLE CRYSTAL OSCILLATOR

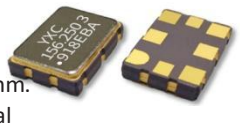
YSO211PR

Applications

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

Features

- Freq range:150MHz-2100MHz.
- Output PECL, LVDS, HCSL, CML.
- Ultra-low RMS Jitter : 150 fsec (typ.) @ 3.3V , 156.250 MHz
- Package Size: 3.2*2.5 , 5.0*3.2 7.0*5.0mm.
- Quartz Crystal Programmable Differential Oscillator.

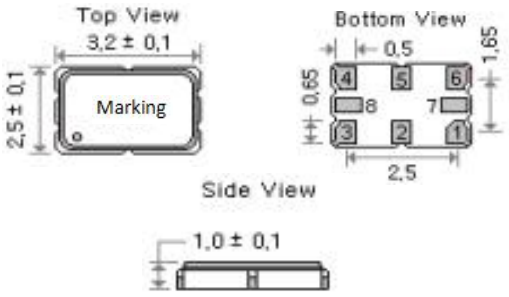


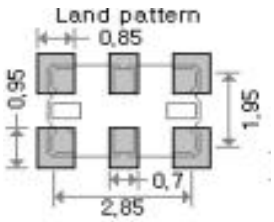
Specifications

Item/Type	PECL	LVDS	HCSL	CML
Output Frequency Range	150MHZ~2100MHZ	150MHZ~2100MHZ	150MHZ~700MHZ	150MHZ~2100MHZ
Supply Voltage	1.8V, 2.5V, 3.3V	2.5V, 3.3V	1.8V, 2.5V, 3.3V	1.8V, 2.5V, 3.3V
Total Stability	±20ppm, ±50ppm, ±100ppm or specify			
Operating Temperature Range	-40~+85℃,or specify			
Storage Temperature Range	-55~+150℃			
Current Consumption (VDD = + 3.3 V)	100 mA (typ.) , 120 mA (max.)	75 mA (typ.) , 90 mA (max.)	94 mA (typ.) , 115mA (max.)	70 mA (typ.), 85 mA (max.)
Disable Current	99 mA (typ.)	74 mA (typ.)	93 mA (typ.)	69 mA (typ.)
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	50 Ω to GND	50 Ω to GND
Duty Cycle	45~55%			
Rise Time/Fall Time (20% to 80% Waveform)	0.4nS Max			
Start-up time	5 msec (typ.) ; 10 msec. (max.)			
Aging	±3ppm Max			
RMS Jitter (typ.) (12 KHz to 20 MHz)	156.250 MHz : 159 fsec. ; 491.520 MHz : 155 fsec. ; 644.530 MHz : 151 fsec. ; 2,000 MHz : 163 fsec.			

Dimensions and Patterns [unit:mm]

Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
3.2*2.5mm	





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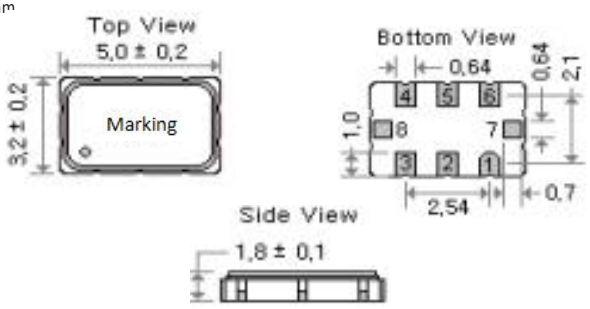
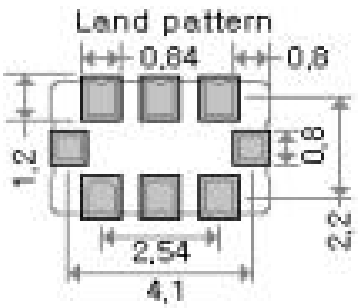
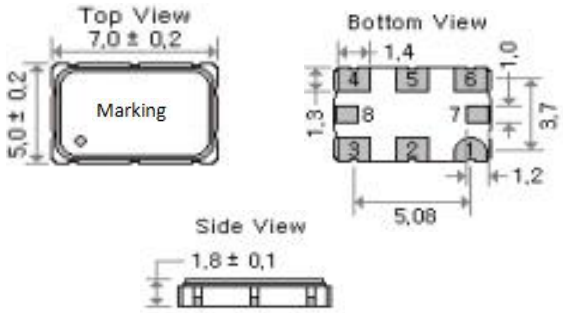
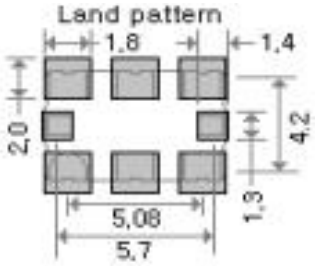
5.0*3.2mm





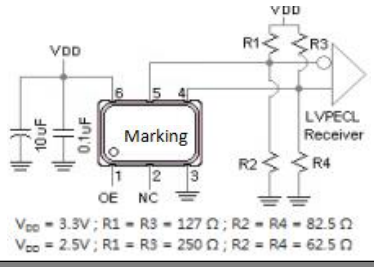
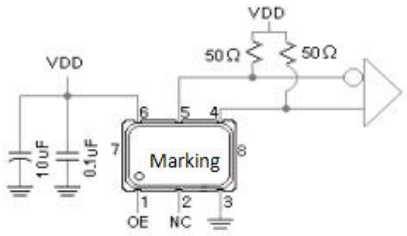
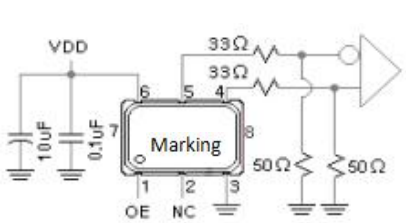
7.0*5.0mm





Pad Connections :
Pad 1 : Output Enable ; **Pad 2** : No Connection ; **Pad 3** : Ground ; **Pad 4** : Output ;
Pad 5 : Complementary ; **Pad 6** : Supply Voltage ; **Pad 7 , Pad 8** : Do Not Connect

Test Circuit

PECL	CML	HCSL
		

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