

Programmable Crystal Oscillator

YSV220PR VCXO

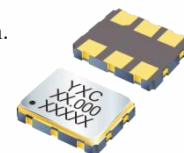


Applications

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

Features

- High Frequency Range : 10-1500MHz.
- Package Size: 3.2*2.5 , 5.0*3.2 7.0*5.0mm.
- Output LVPECL or LVDS.
- High precision characteristic covering up to wide frequency range



Specifications

Item/Type	LVPECL	LVDS	Remarks
Output Frequency Range	10MHZ~1500MHZ		
Supply Voltage	2.5Vdc ± 10% 3.3Vdc ± 10%		
Total Stability	±30ppm, ±50ppm or specify		
Absolute Pull Range	±50ppm Min.		
Operating Temperature Range	-40~+85°C, or specify		
Storage Temperature Range	-55~+125°C		
Input Resistance	1Mohms Typ		
Current Consumption	80mA Max	50mA Max	OE=Vcc, LVPECL=(50)Ω or LVDS=(100)Ω
Disable Current	16mA Typ		OE=GND
Output Voltage (LVPECL)	VOH=Vcc-1.03 Min	--	DC characteristics
	VOL=Vcc-1.6 Max	--	
Output Voltage (LVDS)	--	VOD= 350mV	VOD1, VOD2
	--	dVOD=50mV Max.	dVOD= VOD1-VOD2
	--	VOS= 1.25V	VOS1, VOS2
	--	dVOS=50mV Max.	dVOS= VOD1-VOD2
Output Load Condition	L_PECL=50Ω	--	Terminated to Vcc-2.0V
	--	L_LVDS=100Ω	Connected between OUT to OUT
Input Voltage	VIH=70% VccMin, VIL=30%Vcc Max		OE terminal
Output Symmetry	45~55%		
Rise Time/Fall Time	1nS Max		LVPECL: Between 20% and 80% of (VOH-VOL), LVDS:Between 20% and 80% Differential Output peak to peak voltage
Start-up time	10mS		Time at minimum supply voltage to be 0 s
Phase Jitter(12KHZ~20MHZ)	1.0ps Typ.		200MHZ~800MHZ
	2.0ps Typ.		801MHZ~1500MHZ
Aging	±3ppm		25°CFirst year, Vcc=2.5V,3.3V

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Pin Dimension

Pin	#1	#2	#3	#4	#5	#6
FUNCTION	Vcon	OE	GND	OUT+	OUT-	VDD

Notes: To maintain stable operation provide a 0.01uF to 0.1uF by-pass capacitor at a location as near as possible to the power source terminal of the crystal product (between Vcc-GND).

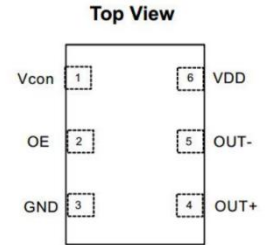


Figure 1. Pin Assignments

Dimensions and Recommended land pattern

Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>3.2*2.5mm</p>	
<p>5.0*3.2mm</p>	
<p>7.0*5.0mm</p>	

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Test Circuit

