

Programmable Crystal Oscillator

YSV311PJ VCXO

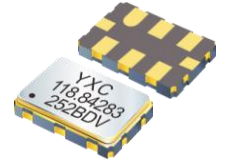


Applications

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

Features

- Freq. Range: 15MHz-250MHz.
- Package Size: 5.0*3.2, 7.0*5.0mm.
- Operating Voltage : 1.8V, 2.5V or 3.3V.
- Ultra-low RMS phase jitter.



Specifications

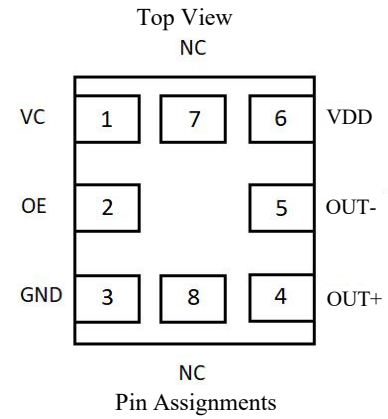
Item / Type	SMD VCXO	CMOS		
Output Frequency Range		15MHz~250MHz		
Supply Voltage		1.8V, 2.5V, 3.3V		
Total Stability		±25ppm, ±50ppm, ±100ppm or specify		
Absolute Pull Range		±100ppm (min), ± 200ppm (available)		
Operating Temperature Range		-40~+85°C, or specify		
Storage Temperature Range		-55~+150°C		
Input Impedance		5 MΩ (min.)		
Current Consumption (VDD = + 3.3 V)		50MHz : 70mA (typ.), 250MHz : 80mA (typ.)		
Output Load		15pF(max)		
Duty Cycle		45~55%		
Rise Time / Fall Time (20% to 80% Waveform)		5.0nsec (max.)		
Start-up Time		5msec. (typ.) ; 10msec. (max.)		
Aging		± 3 ppm (max.) for first year ; ± 2 ppm (max.) per year thereafter		
RMS Jitter [12 kHz ~ 20 MHz]		159fsec (typ.)		
Control Voltage Function on Pad 1				
Vcontrol Center	+ 0.9 V for VDD = + 1.8 V	+ 1.25 V for VDD = + 2.5 V	+ 1.65 V for VDD = + 3.3 V	
Vcontrol Range	+ 0.0V ~ +1.8V	+ 0.25V ~ +2.25V	+ 0.3V ~ +3.0V	
Linearity	± 1%(typ.) ; ±10% (max.)			
Transfer Function	Positive Transfer			
Input Impedance	5MΩ (min.)			
Bandwidth	10KHz (typ.) Measured at -3 dB			
Output Enable Function on Pad 2				
Output Enable / Disable Function	80% of VDD (min.) to enable output.			
	20% of VDD (max.) to disable output.			
Output Enable Time / Disable Time	2.5msec (max.) / 10usec (max.)			

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Pin Dimension

Pin	#1	#2	#3	#4
FUNCTION	VC	OE	GND	OUT+
Pin	#5	#6	#7	#8
FUNCTION	OUT-	VDD	NC	NC



Dimensions and Recommended land pattern

Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>5.0*2.5mm</p> <p>Top view</p> <p>Bottom view</p> <p>Side view</p>	
<p>5.0*2.5mm</p> <p>Top view</p> <p>Bottom view</p> <p>Side view</p>	

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Test Circuit

