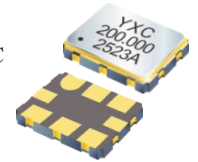


Programmable Differential Oscillator YSO211PJ



Applications

- networking
- industrial

Features

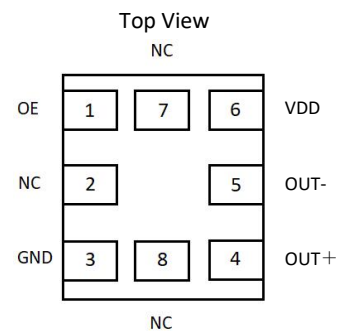
- High Frequency Range : 150-2100MHz.
- Ultra-low RMS Jitter : 159fsec (typ.) @ 3.3V , 156.250 MHz
- Low jitter design with new developed IC
- Package Size: 3.2*2.5mm, 5.0*3.2mm, 7.0*5.0mm

Specifications

Item/Type	LVPECL	LVDS	HCSL	CML
Output Frequency Range	150MHZ~2100MHZ	150MHZ~2100MHZ	150MHZ~700MHZ	150MHZ~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	±20ppm, ±50ppm, ±100ppm or specify			
Output Load	50 Ω into VDD - 2V or Thevenin equivalent	100 Ω	50 Ω to GND	50 Ω to VDD
Operating Temperature Range	-40~+85°C, or specify			
Storage Temperature Range	-55~+150°C			
Rise Time/Fall Time (20% to 80% Waveform)	0.4nS Max			
Duty Cycle	45~55%			
Start-up time	5 msec (typ.) ; 10 msec. (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.			
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.)
Enable / Disable Function on Pad 1	80% of VDD (min.) to enable output.			
	20% of VDD (max.) to disable output.			
Enable / Disable Time	2.5 msec. (max.) / 10 usec. (max.)			
Aging at Ta = +25°C	+ 3 ppm (max.) for first year ; ± 2 ppm (max.) per year thereafter			

Pin Dimension

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



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Dimensions and Recommended land pattern

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

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Test Circuit

