

# Programmable Temperature Compensated YSO511PJ TCXO



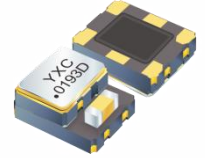
## Applications

- networking
- industrial

## Features

- One time programmable performance of 0.8pS RMS

- Low jitter design with new developed IC
- Package Size: 3.2\*2.5mm, 7.0\*5.0mm



## Specifications

Item / Type	CMOS							
Frequency Range	10MHz to 250MHz							
Supply Voltage VDD	2.5V, 3.3V							
Operating Temperature Range	-40~+85°C, or specify							
Storage Temperature Range	-55~+150°C							
Output Type	CMOS							
Rise Time / Fall Time (Tr / Tf : 10% ↔ 90% waveform)	1.5nsec. ( typ. ) , 3.0nsec. ( max. )							
Duty Cycle	45~55%							
Start-up Time	5.0msec. ( max. )							
RMS Jitter [ 12 kHz ~ 20 MHz ]	0.8psec ( typ. )							
Current Consumption ( max. )	Vdd=2.5V				Vdd=3.3V			
	50 MHz : 34mA 125 MHz : 38mA 200 MHz : 40mA				50 MHz : 36mA 125 MHz : 40mA 200 MHz : 44mA			
Current with Output Disabled	18mA ( Typ. )							
Rise Time / Fall Time	1.5nsec. ( typ. ) , 3.0nsec. ( max. ) Tr / Tf : 10% ↔ 90% waveform							
Initial Calibration Tolerance	±2.0 ppm ( max. ) at +25°C±2°C ( at the shipment )							
Frequency Stability	Temperature (ref to +25°C)				± 2.5 ppm over -30°C to +85°C ( default )			
					± 1.0 ppm over -40°C to +85°C ( available )			
	Aging at Ta = +25°C				± 2.0 ppm max, first year at 25°C			
	Voltage Change				± 0.2 ppm max, for a ±5% input voltage change.			
	Load Change				± 0.2 ppm max, for a ±10% load condition change.			
Phase Noise[ dBc / Hz ( typical ) ]	Reflow				± 1.0 ppm max, 1 reflow and measured 24 hours afterwards.			
	Offset	10Hz	100Hz	1KHz	10KHz	100KHz	1MHz	10MHz
	125MHz	-51	-93	-111	-123	-125	-135	-155
	212.5MHz	-42	-87	-105	-115	-118	-130	-151
	312.5MHz	-49	-88	-107	-111	-114	-124	-147

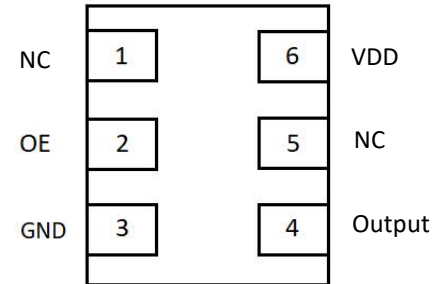
# Programmable Temperature Compensated YSO511PJ TCXO



## Pin Dimension

Pin	#1	#2	#3
FUNCTION	No Connection	Out Enable	Ground
Pin	#4	#5	#6
FUNCTION	Output	No Connection	Supply Voltage

Top View



Pin Assignments

## Dimensions and Recommended land pattern

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

*Programmable*  
*Temperature Compensated*  
**YS0511PJ TCXO**



**Test Circuit**

