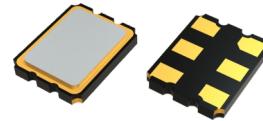


# FASTXO 3.2 × 2.5 mm SMD CMOS Output Crystal Oscillator

## Feature

- Low power supply voltage: 3.3, 2.5 supply options
- Singled-end output : CMOS
- Frequency support from 10MHz to 250MHz
- Low noise typical: 0.8 ps at 12kHz to 20MHz frequency offsets
- Temperature range: -40 to 85 °C operation
- Fast delivery

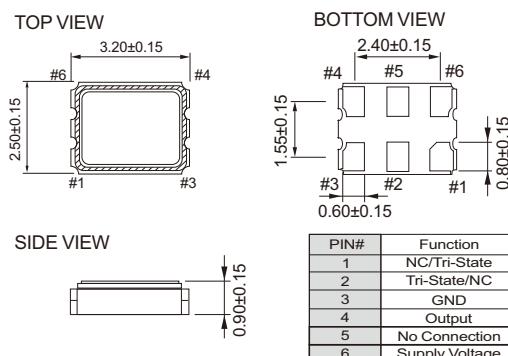


## Electrical Specifications

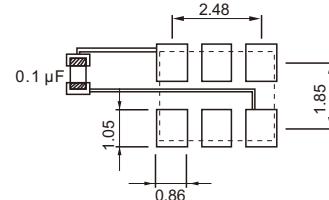
Parameter	3.3V		2.5V		Unit
	Min.	Max.	Min.	Max.	
Supply Voltage Variation	2.97	3.63	2.375	2.625	V
Frequency Range	10	250	10	250	MHz
Supply Current	-	50	-	45	mA
Output level	Output High	2.97	-	2.25	V
	Output Low	-	0.33	-	
Transition Time : Rise/Fall Time	-	1.0	-	1.0	nSec
Start Time	-	10	-	10	mSec
Tri-State(Input to Pin 1/2)	Enable	2.31	-	1.75	V
	Disable	-	0.99	-	
Stand by current	-	18	-	18	mA
Output Loading (10MHz to 200MHz)	-	15	-	15	pF
Output Loading (200MHz to 250MHz)	-	5	-	5	pF
RMS Phase Jitter(integrated 12KHz ~ 20MHz)	0.8	1.5	0.8	1.5	pSec
Phase Noise @125MHz	1KHz	-107	-107	-	dBc/Hz
	10KHz	-111	-111	-	
	100KHz	-114	-114	-	
	1MHz	-125	-125	-	
	20MHz	-147	-147	-	
Aging(@25 1st year)	-	±3	-	±3	ppm
Storage Temp. Range	-55	125	-55	125	°C

.+ Transition times are measured between 20% and 80% of VDD.

## Dimension(mm)



## Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1 μF as close to the part as possible between Vdd and GND pads.

## FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±25	±50
-10 ~ +60	○	○
-20 ~ +70	○	○
-40 ~ +85	△	○

○: Available △:Conditional X: Not available

Inclusive of calibration @ 25 °C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration