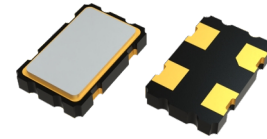


FASTXO 5.0 × 3.2 mm SMD Crystal Oscillator

Feature

- Typical 5.0 x 3.2 x 1.2 mm ceramic SMD package.
- Operation supply voltage: 1.8V, 2.5V and 3.3V
- FASTXO series, Fast delivery at any frequency
- Tri-State Enable/Disable
- Frequency Stability ± 25 ppm over -40 °C to 85 °C
- RoHS compliant/Pb-free



Electrical Specifications

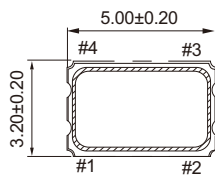
Parameter	3.3V		2.5V		1.8V		Unit
	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation	$V_{DD}-5\%$	$V_{DD}+5\%$	$V_{DD}-5\%$	$V_{DD}+5\%$	$V_{DD}-5\%$	$V_{DD}+5\%$	V
Frequency Range	1	200	1	200	1	125	MHz
Supply Current	-	30	-	28	-	20	mA
Duty Cycle	45	55	45	55	45	55	%
Output Level (CMOS)	Out High (Logic "1")	2.97	-	2.25	-	1.62	V
	Out Low (Logic "0")	-	0.33	-	0.25	-	
Start Time	-	8	-	8	-	8	mSec
Transition Time : Rise/Fall Time	-	2	-	2	-	3	nSec
Tri-State	Output Enable	2.31	-	1.75	-	1.26	V
	Output Disable	-	0.99	-	0.75	-	
Stand by current (@PD mode)	-	400	-	400	-	400	uA
Stand by current (@OE mode)	-	20	-	20	-	20	mA
Output Loading	15		15		15		
RMS Phase Jitter (12KHz to 20MHz) @ 3.3V	-	1	-	1	-	1	pSec
Aging (@25 1st year)	-	± 3	-	± 3	-	± 3	ppm
Storage Temp. Range	-55	125	-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

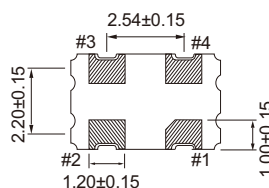
+ Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

Dimension (mm)

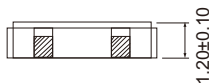
TOP VIEW



BOTTOM VIEW

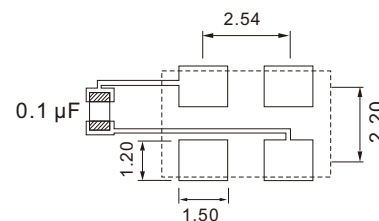


SIDE VIEW



PIN#	Function
1	Tri-State
2	GND
3	Output
4	VDD

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)	±15 ppm	±20 ppm	±25 ppm	±50 ppm
-20 ~ +70	o	o	o	o
-40 ~ +85	X	Δ	o	o
-40 ~ +105	X	X	Δ	o

o: Available Δ: Conditional X: Not available

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