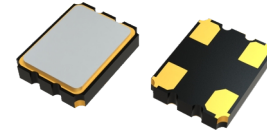


FASTXO 3.2 × 2.5 mm SMD Crystal Oscillator

Feature

- Typical 3.2 x 2.5 x 0.95 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



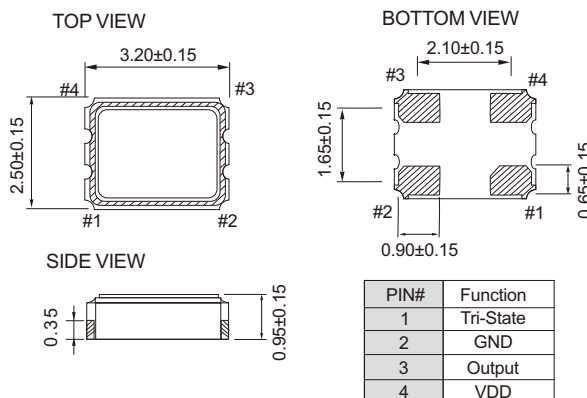
Electrical Specifications

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	-	0.18	
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	-	0.54	
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	$^{\circ}\text{C}$

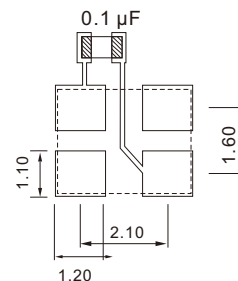
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

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

Dimension(mm)



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

ppm Temp. ($^{\circ}\text{C}$)	± 15	± 20	± 25	± 50
-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