

P E Type Crystal Oscillator

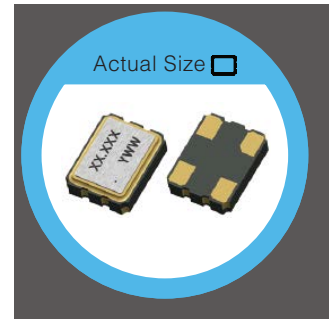
FASTXO 3.2 x 2.5 mm SMD XO Frequency up to 200MHz

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 ± 20 ppm over -40°C to 105°C
- Pb-free/RoHS compliant

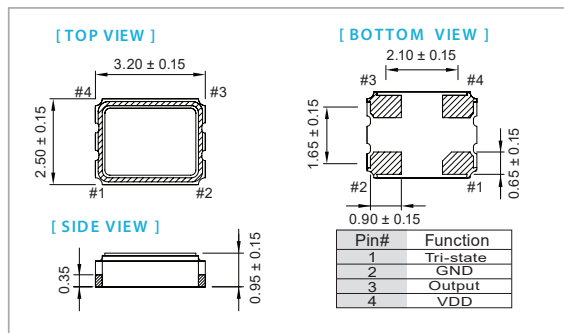
TYPICAL APPLICATION

- Computer Peripherals
- Set-top Box , HDTV
- DSC, PDA

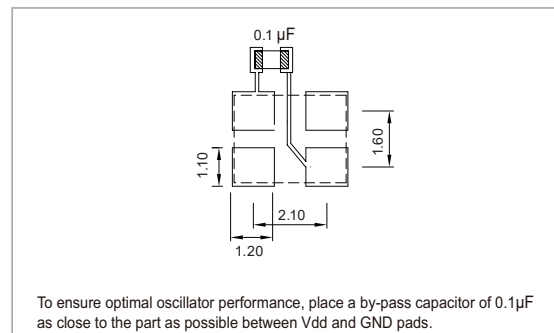


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

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	
V_{DD} Sensitivity ($\pm 5\%$)	-2	2	-2	2	-2	2	ppm	
Supply Current (@15pf Loading)	$1\text{MHz} \leq F_o < 30\text{MHz}$	-	27	-	27	-	25	mA
	$30\text{MHz} \leq F_o < 75\text{MHz}$	-	27	-	27	-	25	
	$75\text{MHz} \leq F_o < 125\text{MHz}$	-	30	-	30	-	25	
	$125\text{MHz} \leq F_o < 170\text{MHz}$	-	35	-	35	-	-	
	$170\text{MHz} \leq F_o \leq 200\text{MHz}$	-	40	-	35	-	-	
Output Level	Output High	$90\% V_{DD}$	-	$90\% V_{DD}$	-	$90\% V_{DD}$	V	
	Output Low	-	$10\% V_{DD}$	-	$10\% V_{DD}$	-	$10\% V_{DD}$	
Transition Time	$1\text{MHz} \leq F_o < 10\text{MHz}$	-	3	-	4	-	4	nSec
Rise Time / Fall Time	$10\text{MHz} \leq F_o < 125\text{MHz}$	-	2	-	3	-	3	
	$125\text{MHz} \leq F_o < 200\text{MHz}$	-	2	-	2	-	-	
Duty Cycle	45	55	45	55	45	55	%	
Startup Time	-	8	-	8	-	8	mSec	
Tri-State	Output Enable	$0.7 \times V_{DD}$	-	$0.7 \times V_{DD}$	-	$0.7 \times V_{DD}$	-	V
	Output Disable	-	$0.3 \times V_{DD}$	-	$0.3 \times V_{DD}$	-	$0.3 \times V_{DD}$	
Stand by Current (@PD Mode)	-	400	-	400	-	400	µA	
Stand by Current (@OE Mode)	-	20	-	20	-	20	mA	
Output Loading	15		15		15		pf	
RMS Phase Jitter offset 12kHz to 20MHz @50MHz	Integer Mode	-	1.5	-	1.5	-	1.5	pSec
	Fractional Mode	-	2.0	-	2.0	-	2.0	
Aging (@ 25°C, First Year)	± 3		± 3		± 3		ppm	
Storage Temp. Range	-55	125	-55	125	-55	125	°C	

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	±15	±20	±25	±50
-20~+70	△	○	○	○	○
-40~+85	×	△	○	○	○
-40~+105	×	△	○	○	○

*O: Available △: Conditional X: Not available
 *Inclusive of calibration @ 25°C, operating temperature range,input Voltage variation,load variation,aging (1st year),shock,and vibration

Note: not all combination of options are available. Other specifications may be available upon request.

Specifications subject to change without notice.