

PX-U Type Crystal Oscillator

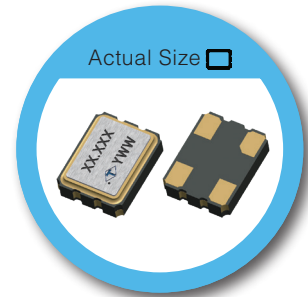
FASTXO 3.2 x 2.5 mm SMD XO Frequency up to 200MHz

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

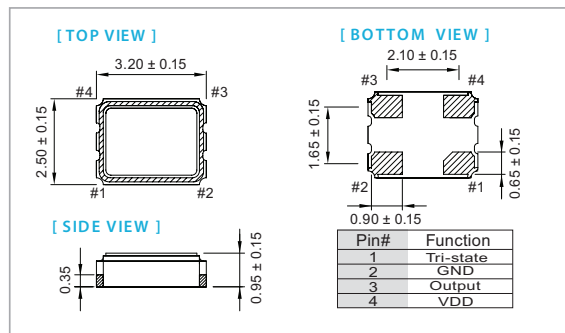
TYPICAL APPLICATION

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

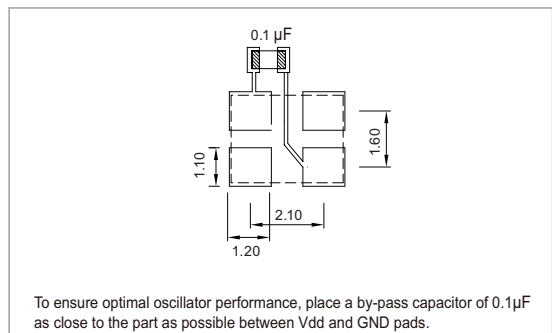


RoHS Compliant

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)	1MHz $\leq$ Fo < 30MHz	-	27	-	27	-	25
	30MHz $\leq$ Fo < 75MHz	-	27	-	27	-	25
	75MHz $\leq$ Fo < 125MHz	-	30	-	30	-	25
	125MHz $\leq$ Fo < 170MHz	-	35	-	35	-	-
	170MHz $\leq$ Fo $\leq$ 200MHz	-	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	1MHz $\leq$ Fo < 10MHz	-	3	-	4	-	4
Rise Time / Fall Time	10MHz $\leq$ Fo < 125MHz	-	2	-	3	-	3
	125MHz $\leq$ Fo < 200MHz	-	2	-	2	-	-
Duty Cycle	45	55	45	55	45	55	%
Startup Time	-	8	-	8	-	8	mSec
Tri-State	Output Enable	0.7 x V _{DD}	-	0.7 x V _{DD}	-	0.7 x V _{DD}	-
	Output Disable	-	0.3 x V _{DD}	-	0.3 x V _{DD}	-	0.3 x 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
	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	$^{\circ}\text{C}$

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	ppm	± 15	± 20	± 25	± 50
-20~+70	Δ	Δ	Δ	Δ	Δ
-40~+85	$\times$	Δ	Δ	Δ	Δ
-40~+105	$\times$	Δ	Δ	Δ	Δ

*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

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