

PZ-U Type Crystal Oscillator

FASTXO 2.0 x 1.6 mm SMD XO

Frequency up to 200MHz

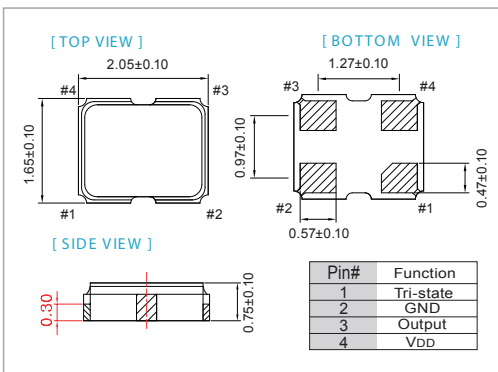
FEATURE

- Typical 2.05 x 1.65 x 0.75 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
- Pb-free/RoHS compliant

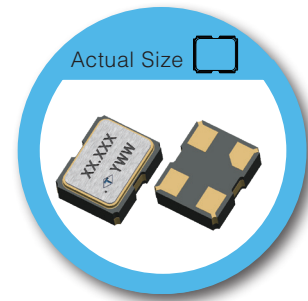
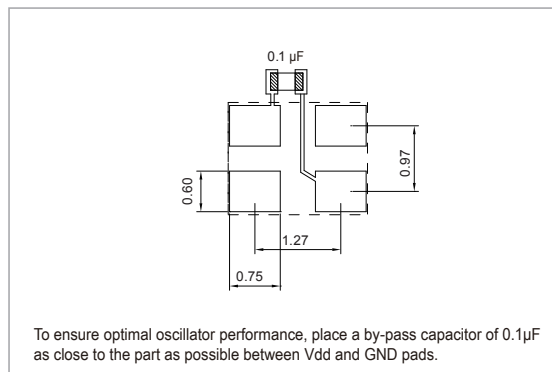
TYPICAL APPLICATION

- Wearable device
- Mobile device
- IoT, Smartphone
- Game console

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



RoHS Compliant

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
Supply Current (@15pf Loading)		-	30	-	28	-	20	mA
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}	V
Transition Time		-	2	-	2	-	3	nSec
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}	-	V
	Output Disable	-	0.3 x V _{DD}	-	0.3 x V _{DD}	-	0.3 x V _{DD}	V
Stand by Current (@PD Mode)		-	400	-	400	-	400	uA
Stand by Current (@OE Mode)		-	20	-	20	-	20	mA
Output Loading		15		15		15		pf
RMS Phase Jitter (12KHz to 20MHz) @3.3V		-	1	-	1	-	1.5	pSec
Aging (@ 25°C, First Year)		-	± 3	-	± 3	-	± 3	ppm
Storage Temp. Range		-50	+125	-50	+125	-50	+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 V_{DD}, with an output load of 15pF.

FREQ. STABILITY vs. TEMP. RANGE

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

*O: Available Δ : Conditional X: Not available

*Inclusive of calibration @ 25°C, operating temperature range, 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.