

PC-U Type Frequency up to 200MHz

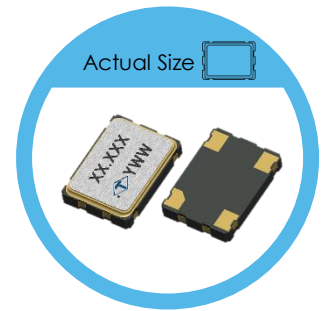
FASTXO 7.0 x 5.0 mm SMD Crystal Oscillator

FEATURES

- Typical 7.0 x 5.0 x 1.3mm Ceramic SMD Package
- Operation Supply Voltage: 1.8V, 2.5V, 3.3V
- FASTXO Series, Fast Delivery at Any Frequency
- Frequency Stability ± 20 ppm over -40°C to 105°C
- Tri-State Enable/Disable
- Pb-free/RoHS Compliant

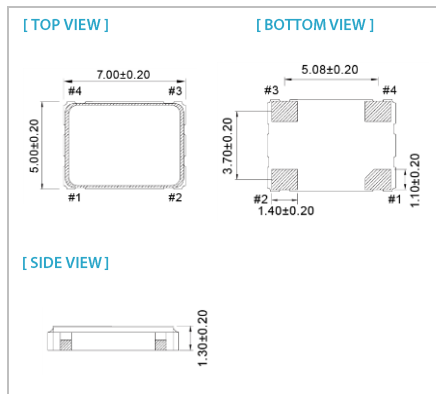
TYPICAL APPLICATION

- xDSL, WLAN, Fiber/10Gbit Ethernet
- Netbook, PDA
- PC, VGA Card

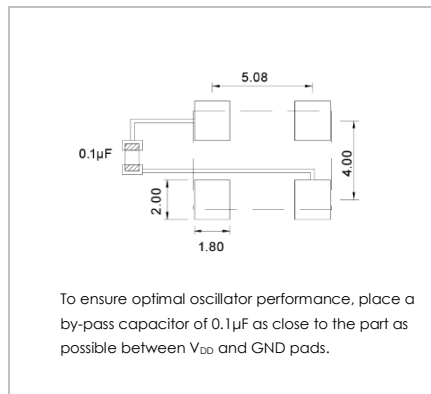


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



PIN FUNCTION (mm)

PIN#	FUNCTION
1	Tri-State
2	GND
3	Output
4	V _{DD}

ELECTRICAL SPECIFICATION

Parameter	3.3V		2.5V		1.8V		Unit	Test Condition	
	Min.	Max.	Min.	Max.	Min.	Max.			
Supply Voltage Variation (V _{DD})	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 MHz \leq Fo < 30 MHz	27	27	27	25	25	mA		
	30 MHz \leq Fo < 75 MHz	27	27	27	25	25	mA		
	75 MHz \leq Fo < 125 MHz	30	30	30	25	25	mA		
	125 MHz \leq Fo < 170 MHz	35	35	35			mA		
	170 MHz \leq Fo \leq 200 MHz	40	40	35			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}	10% V _{DD}	V		
Transition Time: Rise/Fall Time	1 MHz \leq Fo < 10 MHz		3	4		4	nSec		
	10 MHz \leq Fo < 125 MHz		2	3		3	nSec		
	125 MHz \leq Fo < 200 MHz		2	2			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		
RMS Phase Jitter (offset 12 kHz~20 MHz @ 50MHz)	Integer Mode		1.5	1.5		1.5	pSec		
	Fractional Mode		2.0	2.0		2.0	pSec		
Stand by Current (@PD Mode)		400		400		400	µA		
Stand by Current (@OE Mode)		25		25		25	mA		
Output Loading		15		15		15	pf		
Aging (@25°C, 1 st 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		Δ	○	○
-40 ~ +85		X	Δ	○	○
-40 ~ +105		X	Δ	○	○
-40 ~ +125		X	X	X	○

○: 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.
 Specifications subject to change without notice.