

OA-M Type

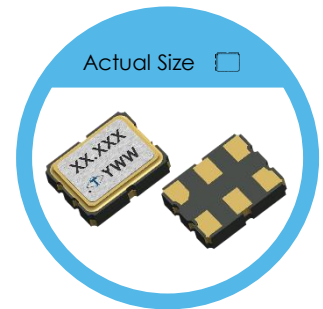
FASTXO 3.2 x 2.5 mm SMD CMOS Output Crystal Oscillator

FEATURES

- Low Power Supply Voltage: 3.3V, 2.5V Supply Options
- Differential Output : CMOS
- Frequency Support from 10MHz to 250MHz
- Low Noise Typical: 0.8ps at 12kHz to 20MHz Frequency Offsets
- Temperature Range: -40 to 85°C Operation
- Pb-free/RoHS Compliant

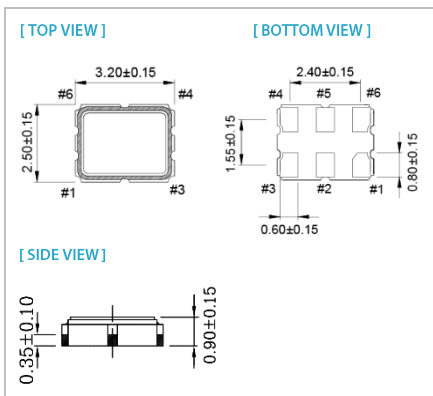
TYPICAL APPLICATION

- Enterprise Server, SAS/SATA, Microprocessors/DSP/FPGA, Broadband Access, Smart Grid
- High-Speed Gigabite Ethernet, Fiber Channel, Storage Area Network, SONET

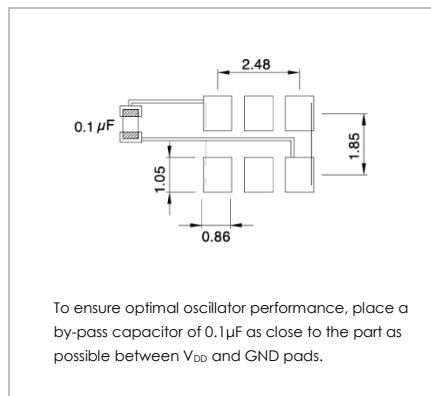


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



PIN FUNCTION (mm)

PIN#	FUNCTION
1	NC/Tri-State
2	Tri-State/NC
3	GND
4	Output
5	No Connection
6	Supply Voltage

ELECTRICAL SPECIFICATION

Parameter	CMOS				Unit	Test Condition
	3.3V		2.5V			
	Min.	Max.	Min.	Max.		
Supply Voltage Variation (V _{DD})	V _{DD} - 10%	V _{DD} + 10%	V _{DD} - 5%	V _{DD} + 5%	V	
Frequency Range	10	250	10	250	MHz	
Supply Current	-	50	-	45	mA	
Output Level	Output High	2.97	-	2.25	V	
	Output Low	-	0.33	-	0.25	V
Transition Time (10%-90%)	Rise Time / Fall Time	-	3	-	3	nSec
Duty Cycle		45	55	45	55	%
Startup Time		-	10	-	10	mSec
Tri-State Mode (Input to Pin 2)	Enable	0.7 x V _{DD}	-	0.7 x V _{DD}	-	V
	Disable	-	0.3 x V _{DD}	-	0.3 x V _{DD}	V
Stand by Current		-	18	-	18	mA
Output Loading (10MHz to 200MHz)		-	15	-	15	Pf
Output Loading (200MHz to 250MHz)		-	5	-	5	pf
Phase Noise		Typ.	Max.	Typ.	Max.	
At V _{DD} =3.3V, f _{out} =250MHz	1kHz offset	-107	-	-107	-	dBc/Hz
	10kHz offset	-111	-	-111	-	dBc/Hz
	100kHz offset	-114	-	-114	-	dBc/Hz
	1MHz offset	-125	-	-125	-	dBc/Hz
	20MHz offset	-147	-	-147	-	dBc/Hz
RMS Phase Jitter (12 kHz~20 MHz)		0.8	1.5	0.8	1.5	pSec

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	
	±25	±50
-10 ~ +60	○	○
-20 ~ +70	○	○
-40 ~ +85	△	○
-40 ~ +105	X	△

○: 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.