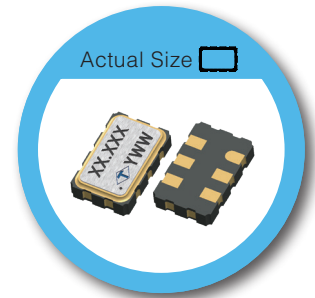


OW-M Type 5.0 x 3.2 mm SMD CMOS Crystal Oscillator



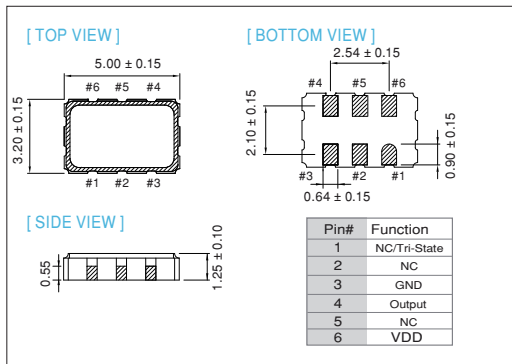
FEATURE

- Industry Standard 5.0 x 3.2 Hermetically sealed ceramic package
- Very low phase jitter: <math>< 1\text{pS}</math>(0.6pS, typ.)RMS
- Any frequency between 10MHz and 250MHz
- Fast delivery

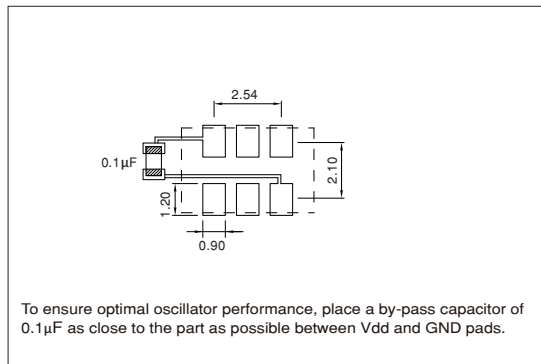
TYPICAL APPLICATION

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

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	CMOS				Unit
	3.3V		2.5V		
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD)	VDD-5%	VDD+5%	VDD-5%	VDD+5%	V
Frequency Range	10	1500	10	1500	
Standard Frequency	106.25, 125, 133.33, 150, 155.52, 158.25, 187.5, 212.5				MHz
Supply Current 10MHz \leq Fo \leq 250MHz	-	30	-	30	mA
Output Level Output High (Logic "1")	2.97	-	2.25	-	V
Output Low (Logic "0")	-	0.33	-	0.25	
Transition Time : Rise/ Fall Time +	-	1.5	-	1.5	nSec
Start Time	-	10	-	10	mSec
Tri-State(Input to Pin 2 or Pin 1)					V
Enable (High voltage or floating)	2.31	-	1.75	-	
Disable (Low voltage or GND)	-	0.99	-	0.75	
RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz) (At Integer Mode)	-	1.0	-	1.0	pSec
Phase Noise @156.25 MHz	100 Hz	-	-75	-	dBc/Hz
	1 kHz	-	-105	-	
	10 kHz	-	-120	-	
Aging (@25°C 1st year)	-	3	-	3	ppm
Storage Temp. Range	-55	125	-55	125	°C

+Transition times are measured between 20% and 80% of VDD

FREQ. STABILITY vs. TEMP. RANGE

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

* ○ : 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.