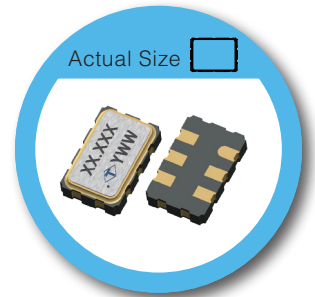


# OW-M Type 5.0 x 3.2 mm SMD LVPECL/LVDS Crystal Oscillator

## FEATURE

- Industry Standard 5.0 x 3.2 x 1.25 hermetically sealed ceramic package
- Very low phase jitter: < 1 pS (0.6 pS, typ.) RMS
- Tri-state enable/disable
- Fast delivery

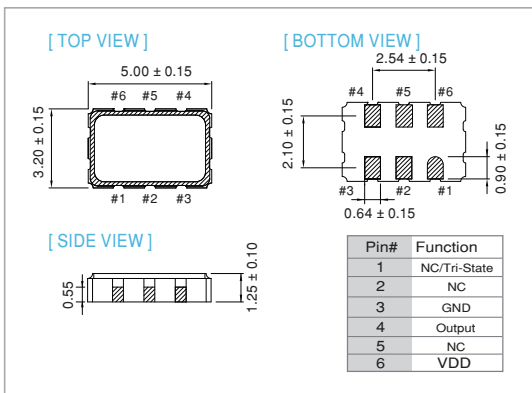


RoHS Compliant

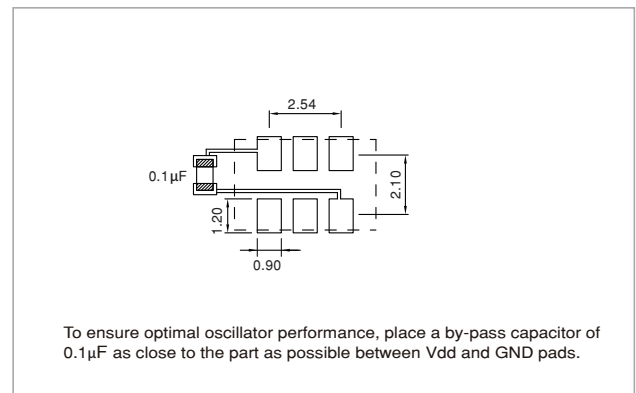
## TYPICAL APPLICATION

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

## DIMENSION (mm)



## SOLDER PAD LAYOUT (mm)



## ELECTRICAL SPECIFICATION

Parameter	LVPECL				LVDS				Unit
	3.3V		2.5V		3.3V		2.5V		
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
Supply Voltage Variation (Vdd)	VDD-5%	VDD+5%	VDD-5%	VDD+5%	VDD-5%	VDD+5%	VDD-5%	VDD+5%	V
Frequency Range	10	1500	10	1500	10	1500	10	1500	MHz
Standard Frequency	106.25, 125, 133.33, 150, 155.52, 156.25, 187.5, 212.5, 312.5, 622.08								
Supply Current 10MHz ≤ Fo ≤ 1500MHz	-	50	-	50	-	50	-	50	mA
Output Level Output High	2.275	-	1.475	-	-	1.6	-	1.6	V
Output Low	-	1.68	-	0.88	0.9	-	0.9	-	
Transition Time : Rise/ Fall Time †	-	1.0	-	1.0	-	1.0	-	1.0	nSec
Start Time	-	10	-	10	-	10	-	10	mSec
Tri-State(Input to Pin 2 or Pin 1 )									
Enable (High voltage or floating)	2.31	-	1.75	-	2.31	-	1.75	-	V
Disable (Low voltage or GND)	-	0.99	-	0.75	-	0.99	-	0.75	
RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz) (At Integer Mode)	-	1.0	-	1.0	-	1.0	-	1.0	pSec
Phase Noise @ 156.25 MHz	-	-85	-	-85	-	-85	-	-85	dBc/Hz
100 Hz	-	-85	-	-85	-	-85	-	-85	
1 kHz	-	-105	-	-105	-	-105	-	-105	
10 kHz	-	-115	-	-115	-	-115	-	-115	
Aging ( @25°C 1st year)	-	±3	-	±3	-	±3	-	±3	ppm
Storage Temp. Range	-55	125	-55	125	-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 (1<sup>st</sup> year), shock, and vibration

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