

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

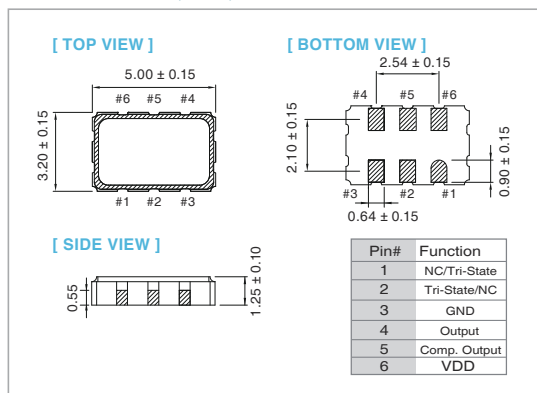
## FEATURE

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

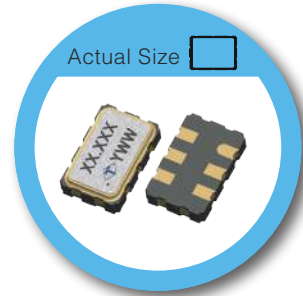
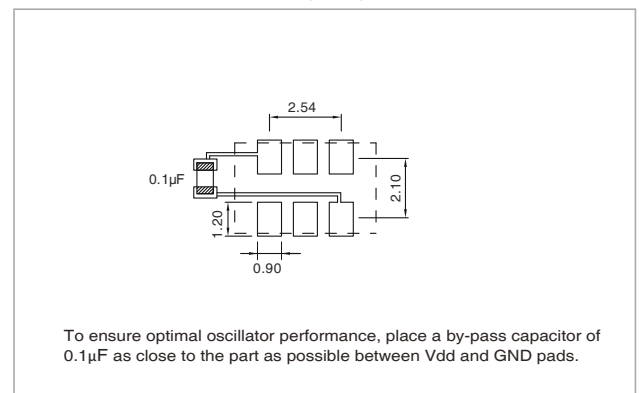
## TYPICAL APPLICATION

- 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)



RoHS Compliant

## 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 ≤ F <sub>o</sub> ≤ 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 <sup>+</sup>	-	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) Disable (Low voltage or GND)	2.31	-	1.75	-	2.31	-	1.75	-	V	
	-	0.99	-	0.75	-	0.99	-	0.75		
RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz) (At Integer Mode)	-	1.2	-	1.2	-	1.2	-	1.2	pSec	
Phase Noise @156.25 MHz	100 Hz	-	-85	-	-85	-	-85	-	-85	dBc/Hz
	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	

<sup>+</sup>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	△	○	○
-40 ~ +105	×	×	△

\* ○ : 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.**

Specifications subject to change without notice.