

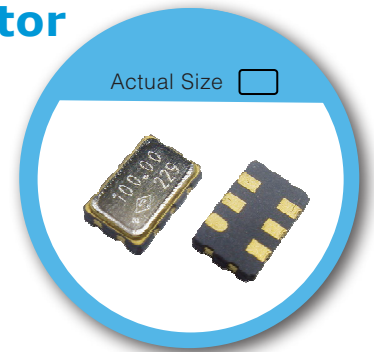
# OW-M Type 5.0 x 3.2mm SMD CMOS Crystal Oscillator

## FEATURE

- Industry Standard 5.0 x 3.2 hermetically sealed ceramic package
- Very low phase jitter: < 1 pS (0.6 pS, typ.) RMS
- Any frequency between 8 MHz and 250 MHz
- Tri-state enable/disable
- Fast delivery

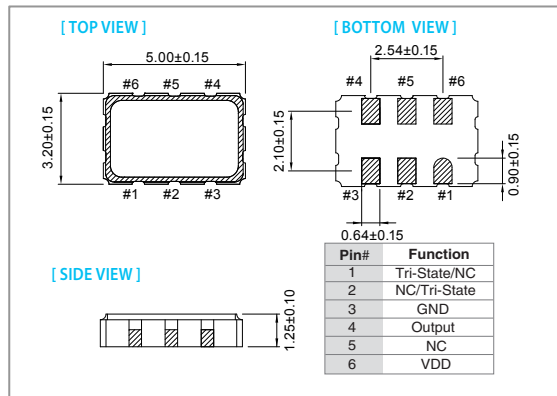
## TYPICAL APPLICATION

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

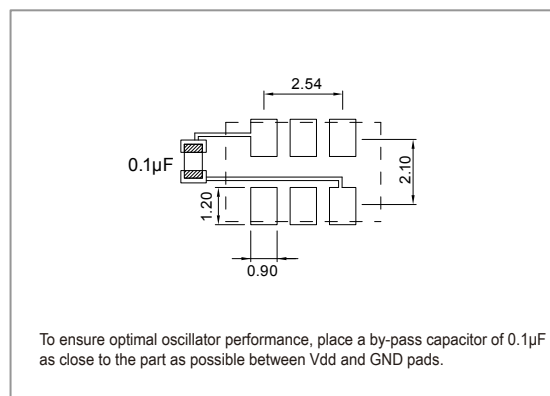


RoHS Compliant

## DIMENSION(mm)



## SOLDER PAD LAYOUT (mm)



## ELECTRICAL SPECIFICATION

Parameter	CMOS				Unit
	3.3V		2.5V		
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) ±5%	3.135	3.465	2.375	2.625	V
Frequency Range	8	250	8	250	MHz
Standard Frequency	106.25, 125, 133.33, 150, 155.52 158.25, 187.5, 212.5				
Supply Current 8 MHz ≤ Fo ≤ 250 MHz	-	30	-	30	mA
Output Level Output High (Logic "1") Output Low (Logic "0")	2.97	-	2.25	-	V
	-	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) Enable (High voltage or floating) Disable (Low voltage or GND)	2.31	-	1.75	-	V
	-	0.99	-	0.75	
RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz)	-	1.0	-	1.0	pSec
Phase Noise @125 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.