

OW-M Type

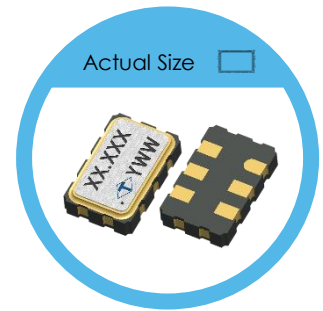
5.0 x 3.2 mm SMD Differential Output Crystal Oscillator

FEATURES

- Industry Standard 5.0 x 3.2 x 1.25mm Hermetically Sealed Ceramic Package
- Ultra Low Jitter Performance: Typical 0.6pS RMS from 12kHz - 20MHz

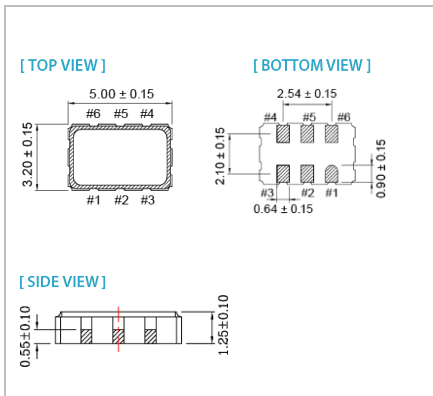
TYPICAL APPLICATION

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

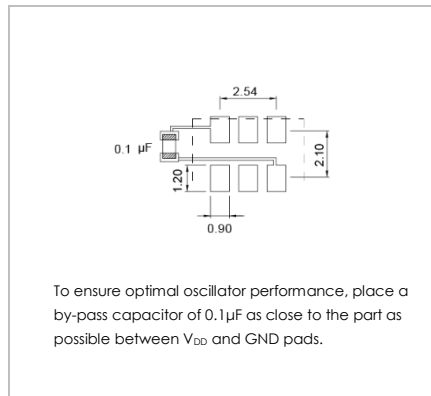


RoHS Compliant

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



PIN FUNCTION (mm)

PIN#	FUNCTION
1	Tri-State/NC
2	NC/Tri-State
3	GND
4	Output
5	Comp. Output
6	V _{DD}

ELECTRICAL SPECIFICATION

Parameter		LVPECL				LVDS				Unit	Test Condition
		3.3V		2.5V		3.3V		2.5V			
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
Supply Voltage Variation (V _{DD})		V _{DD} - 5%	V _{DD} + 5%	V _{DD} - 5%	V _{DD} + 5%	V _{DD} - 5%	V _{DD} + 5%	V _{DD} - 5%	V _{DD} + 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								MHz	
Supply Current	10MHz ≤ F _o ≤ 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	-	V	
Transition Time+	Rise / Fall Time	-	1.0	-	1.0	-	1.0	-	1.0	nSec	
Startup 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	V	
RMS Phase Jitter Integrated 12 kHz~20 MHz	AT Integer Mode	-	1.2	-	1.2	-	1.2	-	1.2	pSec	
Phase Noise @156.25MHz	100Hz offset	-	-85	-	-85	-	-85	-	-85	dBc/Hz	
	1kHz offset	-	-105	-	-105	-	-105	-	-105	dBc/Hz	
	10kHz offset	-	-115	-	-115	-	-115	-	-115	dBc/Hz	
Aging (@ 25°C, First 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 V_{DD}

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.