

Actual Size

RoHS Compliant

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

FFATURE

- 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

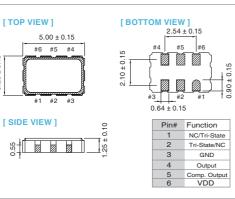
TYPICAL APPLICATION

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

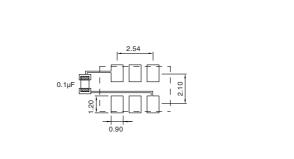
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3.20 ± 0.

DIMENSION (mm)



SOLDER PAD LAYOUT (mm)



To ensure optimal oscillator performance, place a by-pass capacitor of $0.1\mu F$ as close to the part as possible between Vdd and GND pads.

ELECTRICAL SPECIFICATION

	LVPECL				LVDS				
Parameter	3.3V		2.5V		3.3V		2.5V		Unit
	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	
Standard Frequency	106.25, 125, 133.33, 150, 155.52, 156.25, 187.5, 212.5, 312.5, 622.08						MHz		
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	v
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

FREQ. STABILITY vs. TEMP. RANGE

Temp. (°C)	±25	±50
-10 ~ +60	0	0
-20 ~ +70	0	0
-40 ~ +85	Δ	0

* : Available : Conditional X: Not available

 * Inclusive of calibration @ 25 $^\circ\!\!C$, 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.