

OT-M Type 7.0 x 5.0 mm SMD LVPECL/LVDS Crystal Oscillator

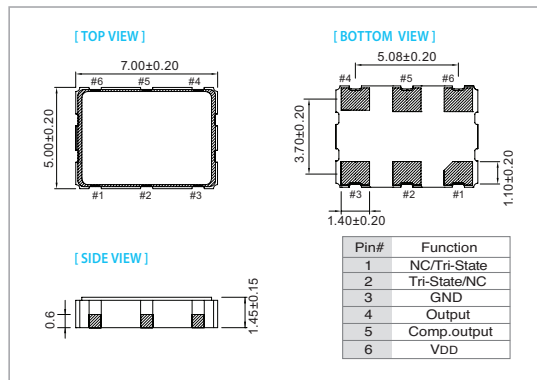
FEATURE

- Typical 7.0 x 5.0 x 1.45 hermetically sealed ceramic package
- Very low phase jitter : 0.6 ps, typ. RMS
- Any frequency between 10 MHz and 1500 MHz.
- Tri-state enable/disable
- Fast deliver

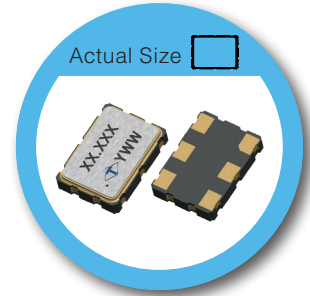
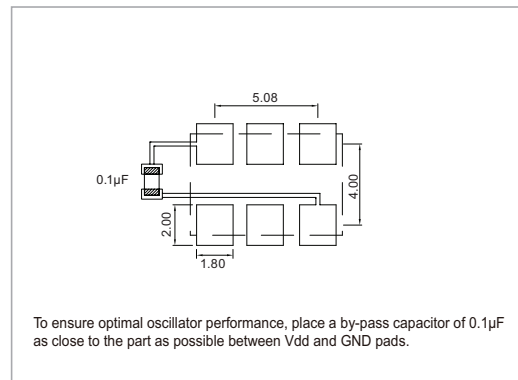
TYPICAL APPLICATION

- 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
	3.3 V		2.5 V		3.3 V		2.5 V		
	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								
Supply Current 10 MHz ≤ F _o ≤ 1500 MHz	-	50	-	50	-	50	-	50	mA
Output Level	Output High		Output Low		Output High		Output Low		V
	2.275	-	1.475	-	-	1.6	-	1.6	
Transition Time: Rise/Fall Time ⁺	-	1.68	-	0.88	0.9	-	0.9	-	nSec
Start Time	-	10	-	10	-	10	-	10	mSec
Tri-State(Input to Pin 2 or Pin 1)									V
Enable (High voltage or floating)	2.31	-	1.75	-	2.31	-	1.75	-	
Disable (Low voltage or GND)	-	0.99	-	0.75	-	0.99	-	0.75	
RMS Phase Jitter (Integrated 12 KHz ~ 20 MHz) (At Integer Mode)	-	1.2	-	1.2	-	1.2	-	1.2	pSec
Phase Noise @ 156.25 MHz	100Hz		1 kHz		10 kHz				dBc/Hz
	-94		-94		-94		-94		
	-113		-113		-113		-112		
	-122		-122		-122		-122		
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 V_{DD}.

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 (1st year), shock, and vibration

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