

OT-U Type

7.0 x 5.0 mm SMD Ultra Low Phase Jitter LVPECL Crystal Oscillator

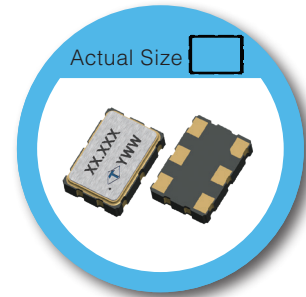
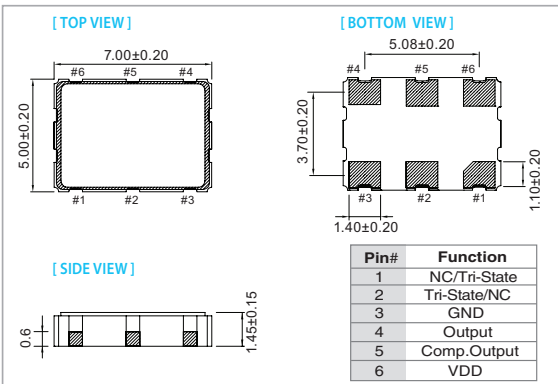
FEATURE

- Typical 7.0 x 5.0 x 1.45 mm 6 pads ceramic SMD package
- Ultra low jitter performance: < 100 fs RMS from 12k-20MHz
- Tight symmetry (45 to 55%) available
- Complementary output

TYPICAL APPLICATION

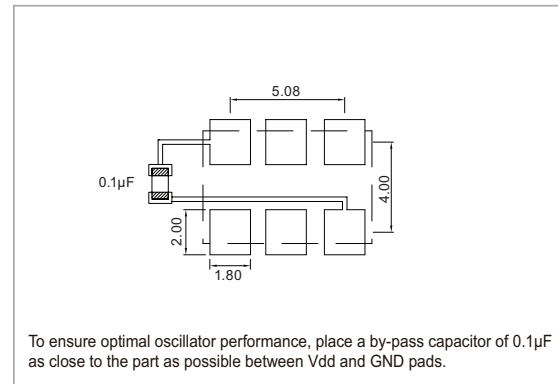
- 40G-Bit/100Gbit Ethernet, MAN, SONET
- WLAN/WiMAX, xDSL
- Fiber Channel
- Test Instrumentation

DIMENSION (mm)



RoHS Compliant

SOLDER PAD LAYOUT (mm)



ELECTRICAL SPECIFICATION

Parameter	LVPECL				unit
	3.3 V		2.5 V		
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD)	VDD-5%	VDD+5%	VDD-5%	VDD+5%	V
Frequency Range	70	170	100	160	MHz
Standard Frequency	100,125,155.52,156.25				
Supply Current 100 MHz ≤ Fo < 170 MHz	-	75	-	75	mA
Output Level					
Output High	2.275	-	1.475	-	V
Output Low	-	1.68	-	1.095	
Transition Time: Rise/Fall Time+	-	1.0	-	1.0	nSec
Start Time	-	10	-	10	mSec
Tri-State(Input to Pin 2 or Pin 1)					
Enable	2.31	-	1.75	-	V
Disable	-	0.99	-	0.75	
RMS Phase Jitter (Integrated 12 kHz ~ 20 MHz)					
70MHz ≤ Fo ≤ 170MHz	-	0.1	-	0.1	pSec
Phase noise@156.25MHz	100Hz	-100	-100		dBc/Hz
	1KHz	-130	-130		
	10KHz	-150	-150		
Aging	-	±3	-	±3	ppm
Storage Temp. Range	-55	125	-55	125	°C

Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.

+ 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.