

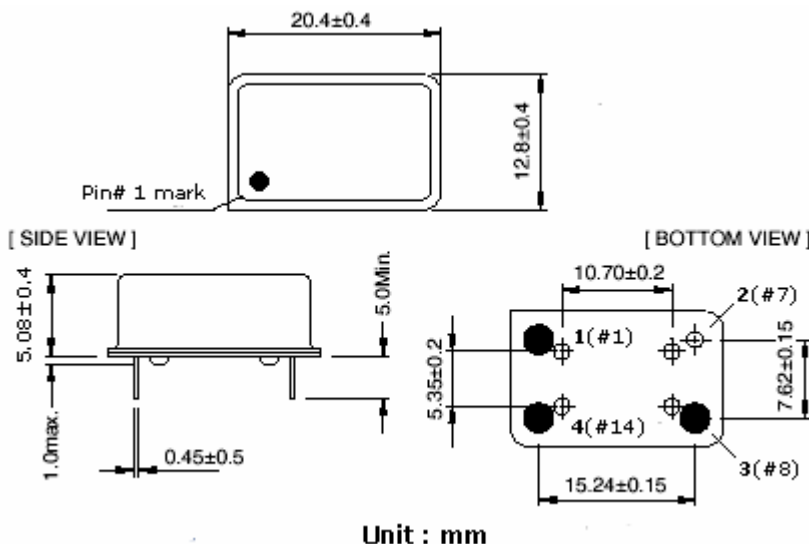
Features

- LVDS, Extended Temperature available
- Metal 14pin DIP Package, Welding, 20.4x12.8x5.08mm
- 2.5V / 3.3V Operation
- RoHS Compliant

Specification

Parameter	Characteristic
Frequency Range	1.000MHz ~ 800.0000MHz
Frequency Stability	+/- 50 ppm std. (See Table 4) Inclusive of operating temperature
Operating Temperature Range	0 ~ 70°C std. (See Table 5)
Storage Temperature Range	-55 ~ +125°C
Input Voltage	3.3Vdc +/- 5% std.
Input Current	80mA max
Output 0 Level (Vol)	Vcc-2.175Vdc max
Output 1 Level (Voh)	Vcc-1.925Vdc min
Symmetry (Duty Cycle)	40/60%@50% of waveform std. (See Table 6)
Rise & Fall Time	0.6nS typical, 1.0nS max
Start up time	10mS max
Output Load	50Ω Differential Load
Aging	+/- 3 ppm max / year
Phase Jitter (12KHz~20MHz)	1pS RMS max (See Table A)
Operating Temperature Range	0 ~ 70°C std. (-40 ~ 85°C Available)
Mechanical Shock	Per MIL-STD-202, Method 213, Cond. E
Thermal Shock	Per MIL-STD-883, Method 1011, Cond. A
Vibration	Per MIL-STD-883, Method 2007, Cond. A
Soldering Conditions	260°C for 10sec. max.: 230°C for 90sec max.
Hermetic Seal	Leak rate less than 5x10-8 atm.cc/s of Helium

Drawing



Pin Connection

- 1 (#1). Comp. Output
- 2 (#7). Ground
- 3 (#8). Output
- 4 (#14). Vcc

Ordering Guide

Typical P/N : MDXL - 19.44M - 3 - 50 A S1 -TU

1

2

3

4

5

6

7

1. Package MDXL = 20.4x12.8x5.08mm

(Metal 14pin DIP LVDS Oscillator, FULL size)

2. Frequency range : 1 to 800MHz

3. Input Voltage : 2 = 2.5V / 3 = 3.3V

4. Frequency Stability

00 : +/- 100ppm

50 : +/- 50ppm

25 : +/- 25ppm

5. Operating Temperature Range

A : 0~70°C

B : -20~70°C

C : -40~85°C

D : -10~70°C

* : The others

6. Symmetry (Duty Cycle)

S1 : 45/55% at 50% of waveform

S2 : 40/60% at 50% of waveform

7. Packing

BU : Bulk

TU : Tube

A. Phase Jitter

1MHz ≤ F < 9.7MHz : 3pS RMS max

9.7MHz ≤ F ≤ 200MHz : 1pS RMS max

200.001MHz < F ≤ 800MHz : 3pS RMS max

(12KHz ~ 20MHz)