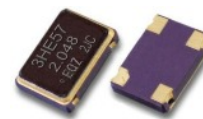


### FEATURES

- Robust industry standard proven clock oscillator design
- Tri-state function available
- Supply Voltage 1.0, 1.2, 1.8, 2.5, 3.3 or 5.0 Volts
- 15pF Load Capability, 30pF or 50pF available on request
- Wide range of frequency options available



### APPLICATIONS

- CPU, Graphics, Multimedia, A/V clocks
- MPEG/DVD/HDTV clocks
- Laser engine pixel / Set-top clocks
- OC-3, OC-12, OC-48 and OC-192 clocks
- SONET SDH / ATM clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PA Encoder / decoder clocks
- PLL / Synthesizer clocks
- Fibre Channel and ADSL clocks

### ELECTRICAL SPECIFICATION

Model Number	XO22 Series					
Output Logic	CMOS					
Supply Voltage V <sub>DD</sub>	1.0V ±5%	1.2V ±5%	1.8 V ±10%	+2.5 V ±10%	+3.3 V ±10%	5V ±10%
Frequency Range	0.75MHz ~ 50MHz	0.75MHz ~ 50MHz	0.625MHz ~ 160MHz	0.625MHz ~ 160MHz	0.625MHz ~ 160MHz	1.00MHz ~ 50MHz
Logic High "1" (90% of V <sub>DD</sub> min.)	0.9V	0.9V	1.62V	2.25V	2.97V	4.50V
Logic Low "0" (10% of V <sub>DD</sub> max)	0.1V	0.1V	0.18V	0.25V	0.33V	0.50V
Rise/Fall Time (Tr)	6ns max., Measured between 10% ~ 90% of wave form (CL = 15pF)					
Load	15pF typical	15pF typical (30pF, 50pF load available for +3.3V <sub>DD</sub> )				
Start-up Time	1.0 ~ 32.0MHz : 5ms (max) ; 32.1 ~ 160.0MHz : 10ms (max)					
Duty Cycle	Standard: 50% ±10% ; Option 50% ±5% (Add "S" after the part number for this option)					
Enable/Disable	Enable/Disable function on Pad 1 is standard for XO22 series oscillators					

### OPERATING TEMPERATURE RANGE

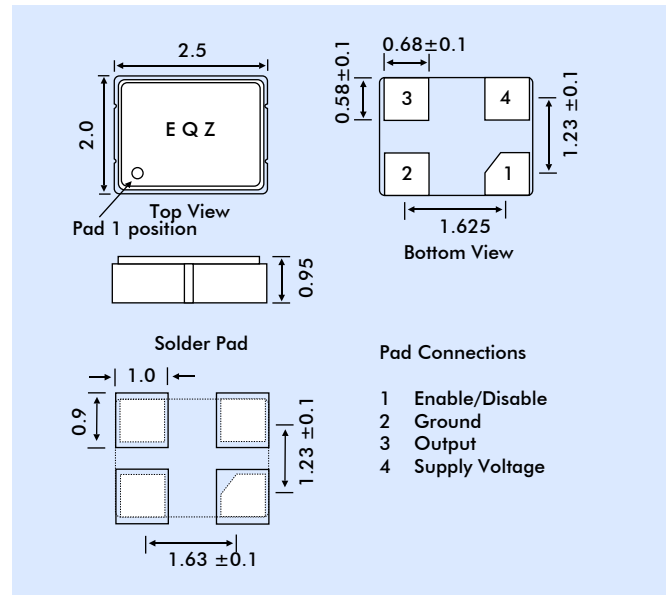
Frequency Stability Standard Values (If non-standard desired, ask for availability)	Frequency Stability over Operating Temperature Range			
	Commercial (-10° ~ +70°C)	±25ppm	±50ppm	±100ppm
	Industrial (-40° to +85°C)	±25ppm	±50ppm	±100ppm

Storage Temperature	-55° to +125°C
Ageing at 25°C	±3ppm maximum per year
Solder Profile	260°C max.

### CURRENT CONSUMPTION

Supply Voltage	Frequency Range	Current Consumption (mA max.)
1.0V	<25MHz	4
	25MHz ~ 50MHz	5
1.2V	<25MHz	4
	25MHz ~ 50MHz	5
1.8V	<25MHz	5
	25MHz ~ 50MHz	8
	51MHz ~ 100MHz	10
	101MHz ~ 160MHz	15
2.5V	<25MHz	5
	25MHz ~ 50MHz	10
	51MHz ~ 100MHz	15
	101MHz ~ 160MHz	20
3.3V	<25MHz	5
	25MHz ~ 50MHz	12
	51MHz ~ 100MHz	30
	101MHz ~ 160MHz	40
5.0V	<25MHz	5
	25 ~ 50MHz	15
	51 ~ 100MHz	40

### OUTLINE & DIMENSIONS



### ORDERING/PART NUMBER GENERATION

Example: 20.000MHz XO22 050 U I T A

Frequency

Series Designation XO22

Stability

025 = ±25ppm

050 = ±50ppm

100 = ±100ppm

(For non-standard value follow same format)

Output CMOS

Operating Temperature Range

C = -10° to +70°C Commercial

I = -40° to +85°C Industrial

Tristate

Supply Voltage

A = 3.3 Volts

B = 2.5 Volts

C = 1.8 Volts

D = 1.2 Volts

F = 1.0 Volts

Blank = 5.0 Volts