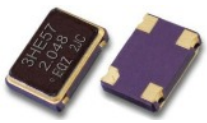
EUROQUARTZ

High Temperature Oscillators

XO32-HT Oscillator — 1MHz to 150MHz

FEATURES

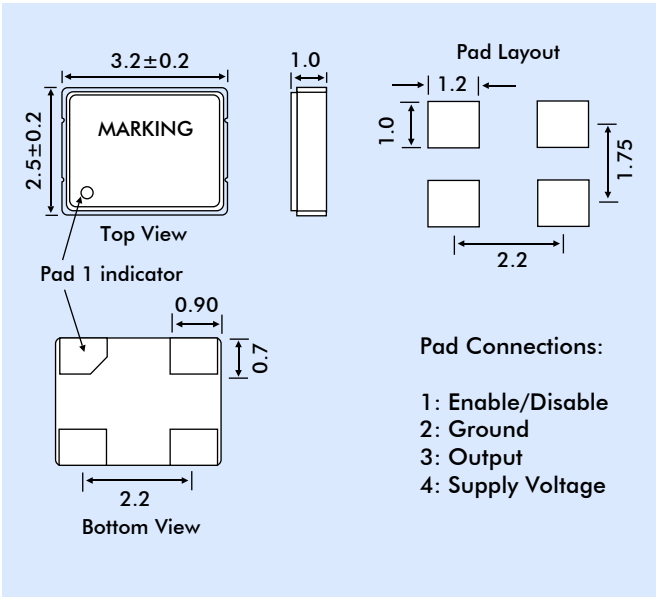
- **Robust industry standard proven clock oscillator design**
- **High operating temperature -40°C to +200°C**
- **Supply Voltage 1.2, 1.8, 2.5, 3.0 or 3.3 Volts**
- **Wide range of frequency options available**



ELECTRICAL SPECIFICATION

Model Number	XO32-HT			
Output Logic	CMOS			
Supply Voltage V_{DD}	1.8 V ±10%	+2.5 V ±10%	+3.0 V ±10%	+3.3 V ±10%
Frequency Range	1.000MHz ~ 150.000MHz			
Logic High "1" (90% of V_{DD} min.)	1.62V	2.25V	2.97V	2.97V
Logic Low "0" (10% of V_{DD} max)	0.18V	0.25V	0.33V	0.33V
Rise/Fall Time (Tr)	1.5ns typical, 5ns max. Measured between 10% ~ 90% of wave form (CL = 15pF)			
Load	15pF typical			
Start-up Time	10ns max.			
Duty Cycle	50±5%, at 1/2Vdd level			
Enable/Disable	Enable/Disable function on Pad 1			
Stand-by Voltage	-0.3V to Vdd+0.3V			
Current Consumption	8mA typical, 10mA max.			
Stand-by Current	60µA typical, 100µA max.			
Disable Delay Time	200ns max.			
Enable Delay Time	10ns max.			
Total Jitter	51ps typical (Vdd=+3.3V, BER= e-12)			
Random Jitter	3.6ps typical (Vdd=+3.3V, BER= e-12)			
RMS Jitter	20ps typical (12kHz to 20.000MHz band)			
Frequency Stability Over Temp Range	±50ppm or ±100ppm			
Operating Temperature	-40°C to +200°C			
Ageing at 25°C	±5ppm max., ±3ppm first year			
Solder Profile	+250±10°C for 10 seconds, +170±10°C for 1 to 2 minutes (preheating)			
Storage Temperature	-40°C to +200°C			

OUTLINE & DIMENSIONS



ORDERING/PART NUMBER GENERATION

Example: 20.000MHz XO32HT 050 U H T A

- Frequency
- Series Designation XO32HT
- Stability
  - 050 = ±50ppm
  - 100 = ±100ppm
- Output CMOS
- Operating Temperature Range
  - H = -40°C to +200°C
- Tristate
- Supply Voltage
  - A = 3.3 Volts
  - B = 3.0 Volts
  - C = 2.5 Volts
  - D = 1.8 Volts

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