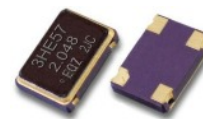


FEATURES

- 2.5 x 2.0 x 0.9mm SMD package
- 32.768kHz for real time clock application
- Tristate (Enable/Disable) function as standard
- 1.8V, 2.5V, 3.3V and 5.0V available
- Low current consumption


ELECTRICAL SPECIFICATION

Model Number	XOA22 Series			
Output Logic	CMOS			
Supply Voltage V_{DD}	1.8V±10%	2.5V±10%	3.3 V ±10%	5.0 V ±10%
Current Consumption (32.768kHz, Load 15pF)	32µA (typ.) 50µA (max.)	32µA (typ.) 50µA (max.)	33µA (typ.) 50µA (max.)	36µA (typ.) 60µA (max.)
Frequency Range	32.768kHz (standard)			
	27.3kHz~100kHz	27.3kHz~100kHz	27.3kHz~100kHz	27.3kHz~52kHz
Logic High "1" (90% of V_{DD} min.)	1.62V	2.25V	2.97V	4.5V
Logic Low "0" (10% of V_{DD} max)	0.18V	0.25V	0.33V	0.5V
Rise/Fall Time (Tr)	20ns max.	20ns max.	12 ns max.	12ns max.
	Measured between 10% ~ 90% of wave form (CL = 15pF)			
Load	15pF typical			
Start-up Time	1.0ms (typ.); 5ms (max.)			
Duty Cycle	50% ±5%			
Enable/Disable	Enable/Disable function on Pad 1 is standard for XO32 series oscillators			
Output Enable/Disable Function	70% of V _{DD} (min.) to enable output			
	30% of V _{DD} (max.) to disable output			
	Disable current: 3µA (max.) for OE ≤ 0.3V			

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°C to +125°C
Ageing at 25°C	±3ppm (max.) for first year; ±2ppm (max.) Per yeay thereafter
Solder Profile	260°C max.

ORDERING/PART NUMBER GENERATION

Example: 29.000kHz XOA22 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 = 5.0 Volts
 - B = 3.3 Volts
 - C = 2.5 Volts
 - D = 1.8 Volts
 ←

OUTLINE & DIMENSIONS

