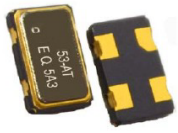
XO53 Series Oscillators

5 x 3.2mm Low Power Consumption Clock Oscillator



FEATURES

- Micro-miniature 5.0mm x 3.2mm package, small footprint
- Frequency Range 2.5MHz to 125MHz
- Tristate function standard
- Supply voltage 1.8, 2.5 or 3.3Volts

DESCRIPTION

The XO53 microminiature oscillators have a small footprint but is fully specified. The oscillator is available with supply voltage at 1.8, 2.5 or 3.3 Volts.

SPECIFICATION

Frequency Range:	2.50MHz to 125.0MHz
Supply Voltage:	1.8, 2.5 Volts, 3.3 Volts
Output Logic:	LSTTL/CMOS
Frequency Stability over Temperature Range	
0° to +50°C:	from ±10ppm
0° to +70°C:	from ±15ppm
-55° to +125°C:	from ±25
Rise/Fall Time:	10ns max. (10% to 90%Vdd) (frequency dependant)
Output Voltage:	
HIGH '1':	90%Vdd minimum
LOW '0':	10%Vdd maximum
Output Load	
CMOS:	15pF (50pF available for 3.3V supply)
TTL:	10 LSTTL loads
Duty Cycle:	50%±5% typical
Supply Current:	See table
Startup Time	
2.5MHz to 32MHz:	5ms max.
32MHz to 125MHz:	10ms max.
Ageing:	±5ppm max. per year
Phase Jitter RMS:	10ps typical
Enable Time:	100ms max.
Disable Time:	100ns max.
Tristate Function (Pad 1):	

Output (Pad 3) is active if Pad 1 is not connected or a voltage of 2.2V or greater is applied to Pad 1. Output is high impedance when a voltage of 0.8V or lower is applied to Pad 1.

Note: Parameters are measured at ambient temperature of 25°C, supply voltage as stated and a load of 15pF

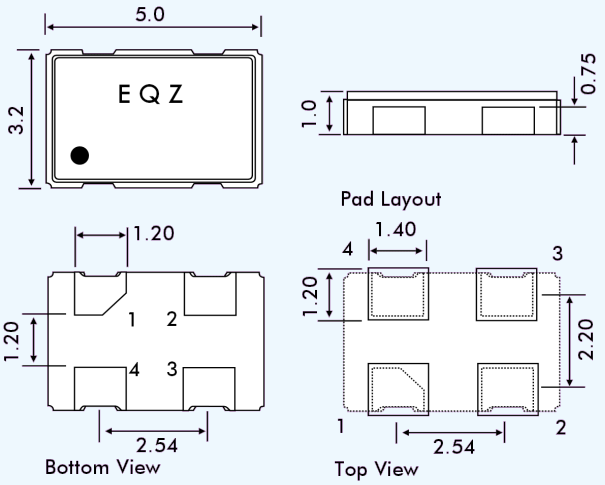
PART NUMBERING

Example: 27.000MHz XO53050UCTA

- Frequency
- Series Designation XO53
- Stability*
  - 100 = ±100ppm
  - 50 = ±50ppm
  - 25 = ±25ppm
- Output Universal
- Operating Temp. Range
  - C = Commercial (0°~70°C)
  - I = Industrial (-40°~+85°C)
- Tristate Function
- Supply Voltage
  - A = 3.3 Volts
  - B = 2.5 Volts
  - C = 1.8 Volts

** For other stability requirements enter figure required.*

OUTLINE & DIMENSIONS

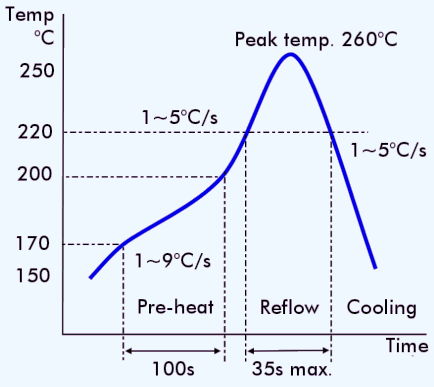


Pad Connections
1 Enable/disable
2 Ground
3 Output
4 Supply Voltage

CURRENT CONSUMPTION

Frequency Range	Supply Voltage (±10%)		
	+1.8V	+2.5V	+3.3V
0.3 ~ 1.5MHz	5mA	5mA	5mA
1.5 ~ 20MHz	8mA	8mA	8mA
20 ~ 50MHz	15mA	15mA	15mA
50 ~ 125MHz	22mA	25mA	35mA

SOLDER TEMPERATURE PROFILE



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