

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 range 2.5V, 3.3 or 5.0Volts

DESCRIPTION

The XO53 microminiature oscillators have a small footprint but a full specification. The oscillator is available with supply voltage at 2.5 3.3 Volts or 5.0 Volts.

SPECIFICATION

Frequency Range:	2.50MHz to 125.0MHz		
Supply Voltage:	2.5 Volts, 3.3 Volts or 5.0 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:	2ns typical (10% to 90%Vdd) (frequency dependant)		
Output Voltage:	2.5V	3.3V	5.0V
HIGH '1':	2.4V min	2.97V min.	4.5V min
LOW '0':	0.2V min	0.33V max.	0.5V max.
Output Load			
CMOS:	15pF		
TTL:	10 LSTTL loads		
Duty Cycle:	50%±10% (50%±5% available)		
Supply Current:	See table		
Startup Time			
2.5MHz to 32MHz:	5ms max.		
32+MHz 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

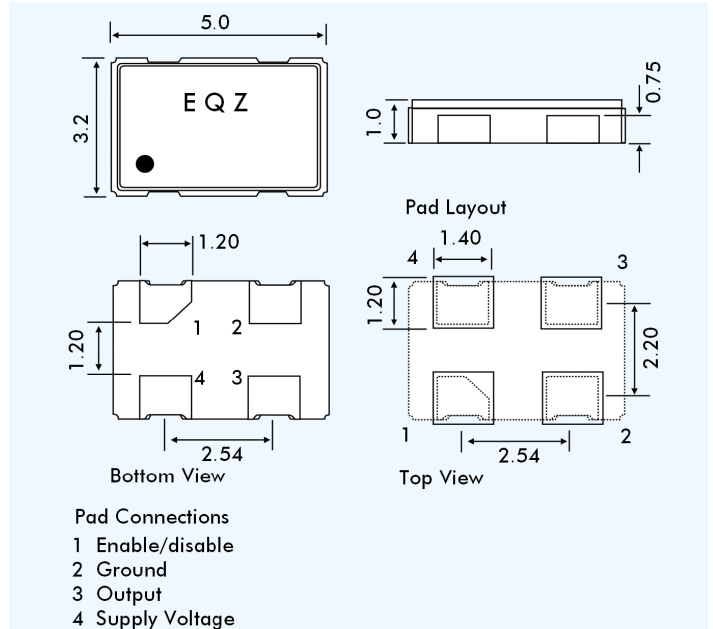
Example: **27.000MHz XO53050UCTA**

Frequency	27.000MHz
Series Designation	XO53
Stability*	050 = ±50ppm
Output Universal	UCTA
Operating Temp. Range	0 = Commercial (0°~70°C)
	I = Industrial (-40°~+85°C)
Tristate Function	
Supply Voltage	A = 3.3 Volts
Blank = 5.0 Volts	B = 2.5 Volts

* For other stability requirements enter figure required.



OUTLINE & DIMENSIONS



CURRENT CONSUMPTION

Frequency Range	Supply Voltage (±10%)		
	+2.5V	+3.3V	+5.0V
2.5 ~ 32MHz	6mA	8mA	15mA
32+~40MHz	12mA	15mA	25mA
40+~125MHz	30mA	35mA	40mA

SOLDER TEMPERATURE PROFILE

