

#### FEATURES

- Micro-miniature 5.0 x 3.2mm package, small footprint
- Frequency Range 1.0MHz to 125MHz
- Tristate function standard
- Supply voltage 1.8, 2.5, 3.3 or 5.0Volts

#### DESCRIPTION

Microminiature XO53 oscillators provide an ideal low-mass source of clock signals for a wide variety of general applications also applications such as OC-3, OC-12, OC48, OC-192 clocks, SONET/SDH/ATM clocks, NTSC/PAL encoder/decoder clocks, Fibre Channel and ADSL clocks.

#### SPECIFICATION

Frequency Range:	1.0MHz to 125.0MHz
Supply Voltage:	1.8, 2.5, 3.3 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:	±100ppm
Rise/Fall Times	
Supply Voltage = 1.8V:	5ns max.
2.5V:	7ns max.
3.3V:	10ns max.
5.0V:	10ns max. (10% to 90%Vdd) (frequency dependant)
Output Voltage:	
HIGH '1':	90%Vdd minimum
LOW '0':	10%Vdd maximum
Output Load	
CMOS:	15pF (30pF available for 3.3V supply, 50pF for 5.0 Volt supply)
Duty Cycle:	50%±10% standard, ±5% available*
Supply Current:	See table
Startup Time	
1.0MHz to 32.0MHz:	5ms max.
32MHz to 125MHz:	10ms max.
Ageing:	±5ppm max. per year
Phase Jitter RMS:	10ps typical
Enable Time:	10ms 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.

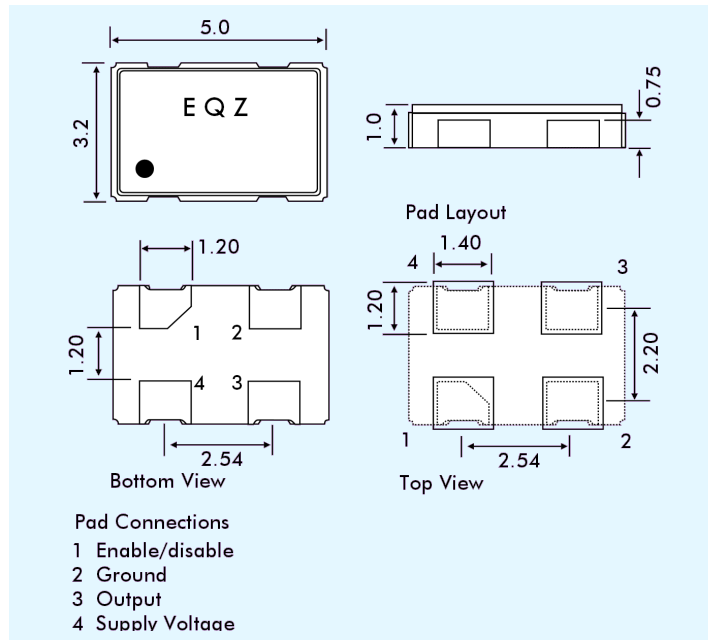
Note: Parameters are measured at ambient temperature of 25°C at supply voltage as stated and load 15pF.

\* For Duty Cycle 50±5% add 'S' to part number code.

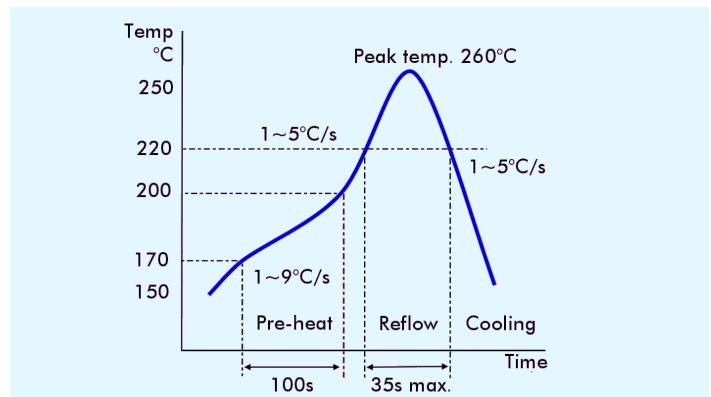
#### CURRENT CONSUMPTION

Frequency Range	Supply Voltage (±5%)			
	+1.8V	+2.5V	+3.3V	+5.0V
1.0 ~ 1.5MHz	5mA	5mA	5mA	5mA
1.5 ~ 20MHz	8mA	8mA	8mA	10mA
20 ~ 50MHz	15mA	15mA	15mA	25mA
50 ~ 60MHz	22mA			
50 ~ 125MHz	n/a	25mA	35mA	40mA

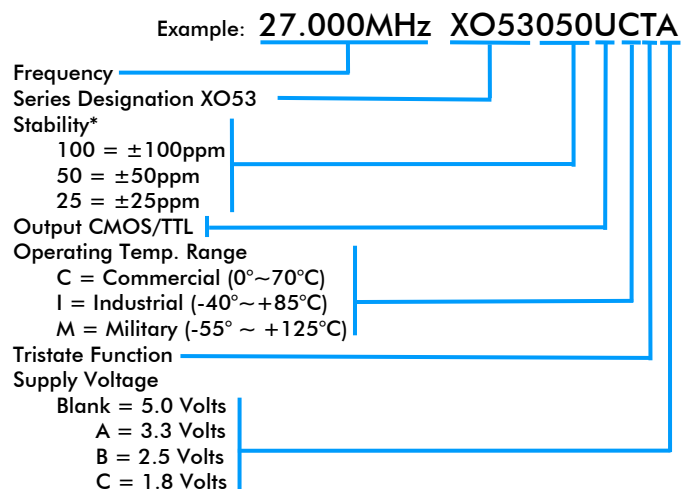
#### OUTLINE & DIMENSIONS



#### SOLDER TEMPERATURE PROFILE



#### PART NUMBERING



\* For other stability requirements enter figure required.