

Features

- Very quick delivery
- Industry-standard 5 x 3.2mm miniature SMD package
- Ultra-low jitter at 1 million samples
- Supply Voltage 2.7V, 3.3V or 5.0Volts
- Enable/Disable or Power Down options

Description

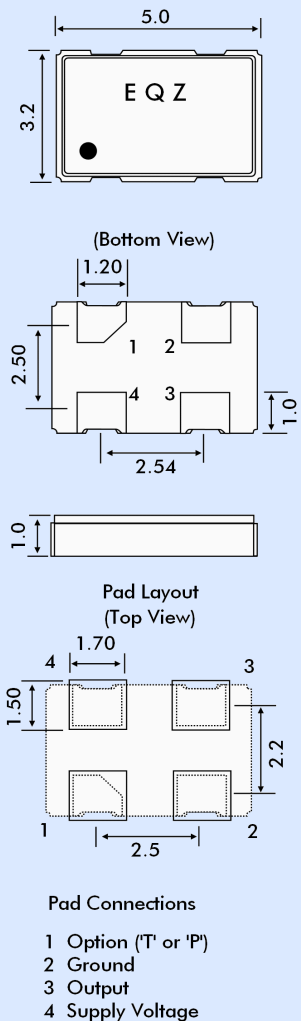
XOPL53 programmable oscillators provide custom frequency and specification oscillators with a very quick delivery time. Jitter, general performance and specification is comparable to discrete frequency oscillators.

Electrical Specification

Frequency Range:	1.000MHz ~ 133.0MHz
Frequency stability:	from ± 25 ppm to ± 100 ppm
Operating Temperature Range:	
0° ~ +70°C	Part Code 'C'
-20° ~ +70°C	Part Code 'D'
-40° ~ +85°C	Part Code 'I'
Storage Temperature Range:	-55° ~ +125°C
Ageing:	± 5 ppm per year max.
Packaging:	Bulk packed or Tubed
Output Levels:	CMOS or TTL
Maximum Output Loads:	Below 40MHz: 30pF Above 40MHz: 15pF (See note opposite)
Duty Cycle:	Below 40MHz: 45/55% min. Above 40MHz: 40/60% min.
Rise/Fall Times:	4ns max.
Supply Current:	25mA (unloaded)
Standby Current:	10 μ A typical, 50 μ A max.
Start-up Time:	10ms max.
Power Down and Disable Delay Time	
Synchronous:	T/2ns typical, T + 10ns typical
Asynchronous:	10ns typical, 15ns maximum (T - frequency period)
Output Enable Time:	100ns maximum
Period Jitter Σ 1MHz ~ 133MHz:	8ps typical, 99ps max.
Period Jitter Peak to Peak	
<33.0MHz:	65ps typical, 99ps max.
33MHz ~ 133MHz:	65ps typical, 80ps max.



OUTLINE & DIMENSIONS



Operating Load Conditions

Maximum Capacitive Load TTL

5.0 Volt Supply	
1.0MHz to 40MHz:	50pF
40.0MHz ~ 133MHz:	25pF

Maximum Capacitive Load CMOS

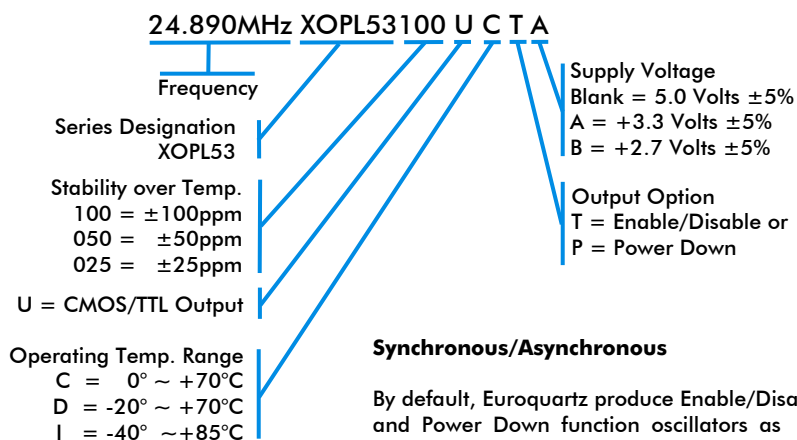
5.0 Volt Supply	
1.0MHz to 66MHz:	50pF
66.1MHz to 133MHz:	25pF

3.3 Volt/2.7 Volt Supply

1.0MHz to 40MHz:	30pF
40.0MHz to 100MHz:	15pF

Model Selection Guide

Part Number Example: 24.890MHz XOPL53100UCTA (see Part Numbers table)



Synchronous/Asynchronous

By default, Euroquartz produce Enable/Disable and Power Down function oscillators as ASYNCHRONOUS. If SYNCHRONOUS operation is required (see above specification for details,) append 'SYNC' to part number.

Part Numbers

Model Number	Stability	Operating Temperature Range
XOPL53100UC	± 100	0° ~ +70°C
XOPL53050UC	± 50	0° ~ +70°C
XOPL53025UC	± 25	0° ~ +70°C
XOPL53100UD	± 100	-20° ~ +70°C
XOPL53050UD	± 50	-20° ~ +70°C
XOPL53025UD	± 25	-20° ~ +70°C
XOPL53100UI	± 100	-40° ~ +85°C
XOPL53050UI	± 50	-40° ~ +85°C
XOPL53025UI	± 25	-40° ~ +85°C