

### 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

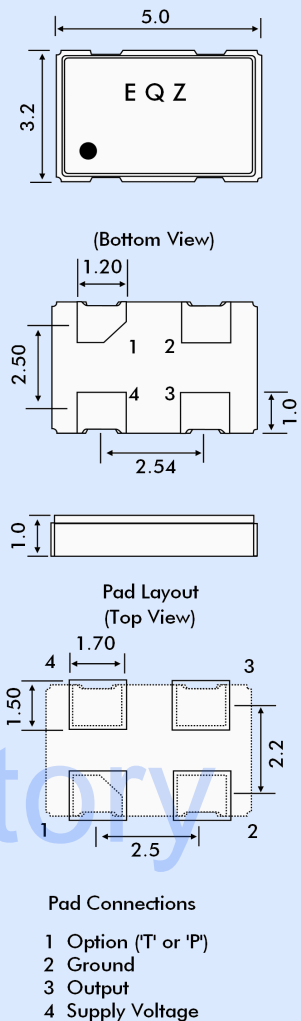
XOPL53 programmable oscillators provide custom frequency and specification oscillators with a very quick delivery time. Jitter, general performance and specification is comparable to discrete frequency oscillators.

### Electrical Specification

Frequency Range:	1.000MHz ~ 133.0MHz
Frequency stability:	from $\pm 25$ ppm to $\pm 100$ 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:	$\pm 5$ 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 $\mu$ A typical, 50 $\mu$ 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 $\Sigma$ 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

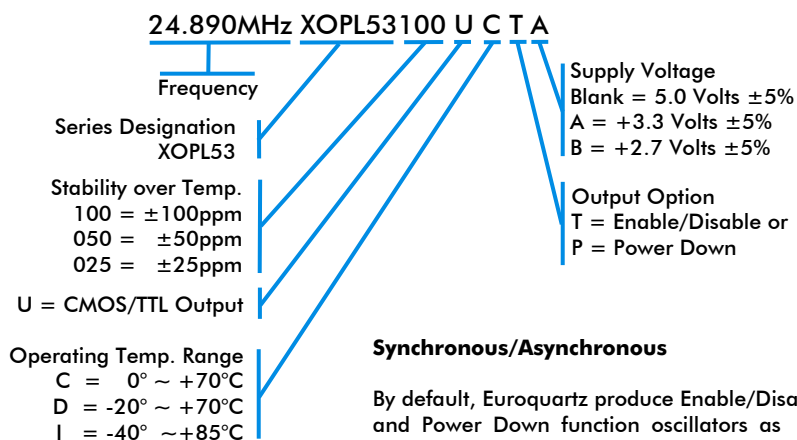
5.0 Volt Supply	
1.0MHz to 66MHz:	50pF
66.1MHz to 133MHz:	25pF

#### 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	$\pm 100$	0° ~ +70°C
XOPL53050UC	$\pm 50$	0° ~ +70°C
XOPL53025UC	$\pm 25$	0° ~ +70°C
XOPL53100UD	$\pm 100$	-20° ~ +70°C
XOPL53050UD	$\pm 50$	-20° ~ +70°C
XOPL53025UD	$\pm 25$	-20° ~ +70°C
XOPL53100UI	$\pm 100$	-40° ~ +85°C
XOPL53050UI	$\pm 50$	-40° ~ +85°C
XOPL53025UI	$\pm 25$	-40° ~ +85°C