

EUROQUARTZ

**SPECIALIST UK MANUFACTURER OF
QUARTZ CRYSTALS AND OSCILLATORS**



**THE WORLD OF
FREQUENCY CONTROL**

EUROQUARTZ

QUALITY OF SERVICE

Euroquartz offer a customer first, knowledgeable service catering for all your frequency related product.

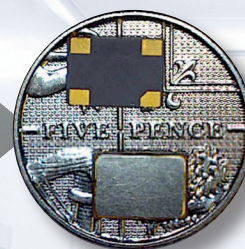
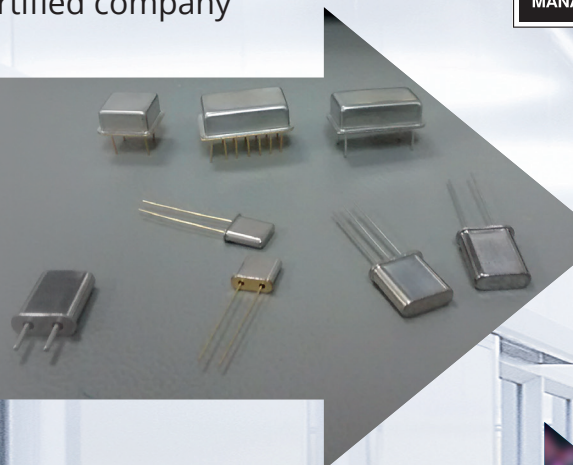
This is supported by our commitment to the highest quality of both product and customer service.

Euroquartz are an AS9100revD certified company



UK PRODUCTION

| | |
|---------------------------|---|
| Leaded crystals | UM5/UM1/HC49U |
| Leaded Oscillators | Dip8 and Dip14 |
| Military Clocks | 8pin package styles 14pin package styles |
| SMD Oscillators | 7x5mm ceramic style |
| Cleanrooms | Two class 7 cleanrooms |



SMD QUARTZ CRYSTALS

- All package sizes
- Frequency Range – 32kHz to 200MHz
- ESR range – 40Ω to 600Ω
- Custom variants available
- Custom test protocols available
- Full Traceability of product



TCXOs

Commercial, Industrial and Military versions available.

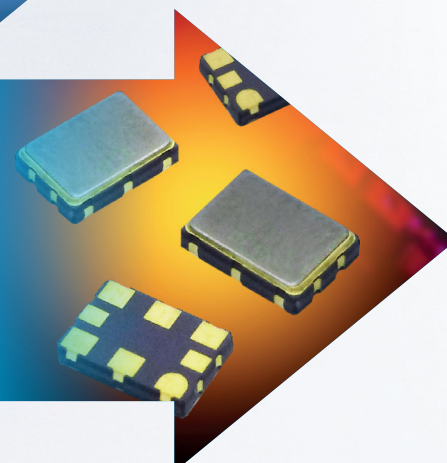
- Output Types – CMOS/Clipped Sine, LVPECL, LVDS and True Sine
- Best Jitter – 0.8pS
- Best Phase Noise – -160dBc/Hz
- Full Military Screening Available



VCXOs

Commercial, Industrial and Military versions available.

- Frequency Range – 10MHz to 1500MHz
- Output Types – CMOS, LVDS, PECL, HCSL, CML
- Package Sizes – 3.2x2.5mm to 7x5mm
- Best Phase Jitter – 150fsecs
- Variants – Switchable output types
- Military Screening Available





OCXOs

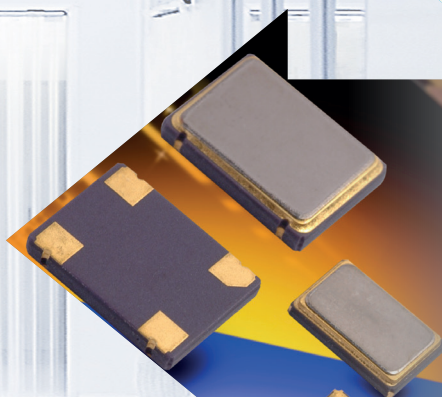
Commercial, Industrial and Military versions available.

- Output Types – CMOS/Clipped Sine, LVPECL, LVDS and True Sine
- Best Jitter – 0.8pS
- Best Phase Noise – 160dBc/Hz
- Full Military Screening available



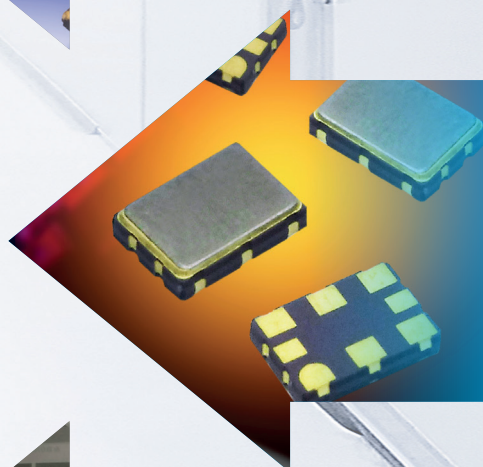
FILTERS

| | |
|-------------------------|-------------------|
| Crystal Filters | 21.4MHz to 175MHz |
| Monolithic | 21.4MHz to 45MHz |
| Ceramic Filters | 45kHz to 10.7MHz |
| Coaxial Filters | 21.4MHz to 175MHz |
| Helical Filters | 1MHz to 2.6GHz |
| SAW Filters | 130MHz to 2.5GHz |
| Customisation available | |



LOW EMI OSCILLATORS

- EMI Reduction – 7dB – 18dB
- Frequency Range – 3MHz -200MHz
- Package Sizes – 7x5mm and 5x3.2mm
- Stability - ± 25 ppm to ± 100 ppm
- Current Consumption – Typ 25mA
- Drop in for standard clock oscillators



HIGH SPEED OSCILLATORS

- Frequency Range – 13.5MHz to 2100MHz
- Output Types – LVDS, LVPECL, CML and HCSL
- Phase Jitter – 0.2 psec to 50 fsec
- Phase Noise – 164dBc at 10MHz offset
- Voltages – 1.8V to 3.3V
- Package sizes – 2.5x2.0mm to 7.0 x5.0mm



DESIGN SUPPORT

- Engineers in UK
- Test Facilities
- Large Technical resource
- Product selection
- Access to crystal mfg technology
- Optimisation
- Sample provision
- Fast Turn product for evaluation

EUROQUARTZ

Authorised UK Distributors for the
following companies

Statek Inc are a US based manufacturer of precision crystals, oscillators and sensors using state of the art semiconductor techniques.

Ideal for harsh environments and high shock, high temperature applications.



AS9100 Certified



Greenray Industries, Inc. is a leading U.S. manufacturer of precision quartz crystal oscillators.

Specialising in TCXO, OCXO and VCXOs for harsh environments and high shock, high vibration applications.

Temwell based in Taiwan manufacture helical filters, tuning coils, cavity filters, stripline filters and duplexers.

Full customisation service available.



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Crewkerne

Somerset

TA18 7HE



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EURO **QUARTZ**

Still making crystals in the UK

AS9100 Rev. D Approved

DESIGN ENGINEERS QUICK REFERENCE OSCILLATOR GUIDE

Low Current Applications Page 2

Low EMI Applications Page 2

Differential Outputs Pages 3 & 4

Temperature Compensated Page 5

Voltage Controlled Page 6

General Clocks Page 7

OCXOs Page 8

Military & Aerospace Page 9

Capability Page 10 & 11

Contact Page 12

ISSUE 2

Clocks

Standard Clock Oscillator – Ultra Low Current

| | |
|---------------------|-------------------|
| Frequency Range | 156kHz – 160MHz |
| Supply Voltage | 1V /2.5V and 3.3V |
| Current Consumption | 1.1mA – 5.0mA |
| Package Sizes | 7x5 mm |

XOA series

Real time clock and precision timing

| | |
|---------------------|----------------------|
| Current Consumption | 32µA - 36µA |
| Frequencies | 27.3kHz – 100kHz |
| Package Sizes | 3.2x2 /5x3.2mm/7x5mm |

XOK series

Standard Clock Oscillator – Ultra Low Current

| | |
|---------------------|-----------------|
| Current Consumption | 1.1mA – 5mA |
| Frequencies | 156kHz – 160MHz |
| Package Sizes | 5x3.2mm/7x5mm |

TCXOs

EME32T

Real time clock, GPS and Smart metering

| | |
|---------------------|-----------|
| Current consumption | 1.5µA |
| Frequencies | 32.768kHz |
| Package Sizes | 3.2x2.5mm |

Spread Spectrum

HM R Group

Reduces Electromagnetic Interference

| | |
|---------------------|-----------------------|
| Frequency Range | 3.5 – 165MHz |
| Spread | Down-0.5% Ctre±0.25 |
| Current consumption | 10mA - 35mA (Typical) |
| Package Sizes | 7x5mm and 5x3.2mm |

HM Y Group

Reduces Electromagnetic Interference

| | |
|---------------------|-----------------------|
| Frequency Range | 8 – 165MHz |
| Current consumption | 10mA - 44mA (Typical) |
| Spread | Down -1% Ctre ±0.5% |
| Package Sizes | 7x5mm and 5x3.2mm |

HM P Group

Reduces Electromagnetic Interference

| | |
|---------------------|-----------------------|
| Frequency Range | 13.0 – 220MHz |
| Spread | Down 0.5% Ctre ±0.25% |
| Current consumption | 25mA Typical |
| Package Sizes | 7x5mm and 5x3.2mm |

HM B Group

Reduces Electromagnetic Interference

| | |
|---------------------|-----------------------|
| Frequency Range | 3.0 – 200MHz |
| Spread | Down -1.0% Ctre ±3.0% |
| Current consumption | 10 -25mA Typical |
| Package Sizes | 7x5mm and 5x3.2mm |

LVPECL Clocks

HPK Series

Differential LVPECL Output waveform

| | |
|---------------------|-------------------------|
| Frequency Range | 13.5 – 220MHz |
| Integrated Jitter | 0.2pS Typical |
| Current consumption | 30mA Typical |
| Package Sizes | 7x5 , 5x3.2 and 3.2x2.5 |

HPQF Series

Differential LVPECL Output Waveform

| | |
|---------------------|-----------------|
| Frequency Range | 10 – 1450MHz |
| Integrated Jitter | 0.9pS Typical |
| Current consumption | 16mA Typical |
| Package Sizes | 7x5 and 5x3.2mm |

HPQN Series

Differential LVPECL Output Waveform

| | |
|---------------------|-----------------|
| Frequency Range | 10MHz – 1450MHz |
| Integrated Jitter | 0.6pS Typical |
| Current consumption | 15 - 31mA |
| Package Sizes | 7x5 and 5x3.2mm |

LVPECL VCXO's

GPQF Series

Differential LVPECL Output VCXO

| | |
|---------------------|--------------|
| Frequency Range | 10 – 1500MHz |
| Pulling Range | ±90ppm min |
| Current consumption | 16mA Typical |
| Package Sizes | 7x5mm |

GPQN Series

Differential LVPECL Output VCXO

| | |
|---------------------|-----------------|
| Frequency Range | 10 – 1450MHz |
| Pulling Range | ±90ppm min |
| Current consumption | 46mA -65mA |
| Package Sizes | 7x5 and 5x3.2mm |

LVDS Clocks

HDK Series

Differential LVDS Output Waveform

| | |
|---------------------|-------------------------|
| Frequency Range | 10 – 220MHz |
| Integrated Jitter | 0.2pS Typical |
| Current consumption | 16mA Typical |
| Package Sizes | 7x5 , 5x3.2 and 3.2x2.5 |

HDQF Series

Differential LVDS Output Waveform

| | |
|---------------------|---------------|
| Frequency Range | 10 – 1450MHz |
| Integrated Jitter | 0.9pS Typical |
| Current consumption | 16mA Typical |
| Package Sizes | 7x5 , 5x3.2 |

HDQN Series

Differential LVDS Output Waveform

| | |
|---------------------|---------------|
| Frequency Range | 10 – 1450MHz |
| Integrated Jitter | 0.6pS Typical |
| Current consumption | 15mA – 31mA |
| Package Sizes | 7x5 , 5x3.2 |

HCK Series

Non-PLL Differential LVDS Output Waveform

| | |
|---------------------|-------------------------|
| Frequency Range | 13.50 – 220MHz |
| Integrated Jitter | 0.2pS Typical |
| Current consumption | 25mA Typical |
| Package Sizes | 7x5 , 5x3.2 and 3.2x2.5 |

LVDS VCXO

GDQF Series

Differential LVDS VCXO

| | |
|---------------------|-------------------------|
| Frequency Range | 10.0 – 1450MHz |
| Integrated Jitter | 0.2nS Typical |
| Current consumption | 25mA Typical |
| Package Sizes | 7x5 , 5x3.2 and 3.2x2.5 |

GDQN Series

Differential LVDS VCXO

| | |
|---------------------|------------------------|
| Frequency Range | 10.0 – 1450MHz |
| Pulling Range | 100ppm Min |
| Current consumption | 16mA Typical |
| Package Sizes | 7x5, 5x3.2 and 3.2x2.5 |

TCXO LVCMOS

EM-T Series

Temperature Compensated Oscillator - CMOS

| | |
|---------------------|--|
| Frequency Range | 8.912 – 40MHz (see std list) |
| Stability | $\pm 0.5\text{ppm}$ to $\pm 3\text{ppm}$ |
| Current consumption | 6-13mA 2.5-5V |
| Package Sizes | 7x5 , 5x3.2 and 3.2x2.5 |

EMQF Series

Temperature Compensated Oscillator - CMOS

| | |
|---------------------|--|
| Frequency Range | 10.00 – 250MHz |
| Stability | $\pm 1\text{ppm}$ to $\pm 2.5\text{ppm}$ |
| Current consumption | 10-50mA 2.5-5V |
| Package Sizes | 7x5 mm 3x2.5mm |

EME32T

Temperature Compensated Oscillator - CMOS

| | |
|---------------------|-----------------------|
| Frequency Range | 32.768kHz |
| Stability | 5ppm over -40+85°C |
| Current consumption | 0.79uA-32.05uA 1.8-5V |
| Package Sizes | 3.2x2.5mm |

EM-S Series

TCXO – Clipped Sinewave Output

| | |
|---------------------|--|
| Frequency Range | 6.40 – 50MHz |
| Stability | $\pm 0.5\text{ppm}$ to $\pm 3\text{ppm}$ |
| Current consumption | 1-5 – 2.5mA 1.8V-5V |
| Package Sizes | 7x5/ 5x3.2/3x2.2/2.2x2mm |

EMQN Series

TCXO – High Frequency

| | |
|---------------------|--|
| Frequency Range | 10 - 245MHz |
| Stability | $\pm 1\text{ppm}$ to $\pm 2.5\text{ppm}$ |
| Current consumption | 24~30mA 2.5-3.3V |
| Package Sizes | 7x5 mm and 3.2x2.5mm |

VCXO SERIES**G Series****Voltage Controlled Oscillator CMOS Output**

| | |
|-----------------|---------------------|
| Frequency Range | 1.0 – 50.0MHz |
| Pulling Range | ±80ppm Min |
| Phase Jitter | 1.0pS Max |
| Package Sizes | 7x5/ 5x3.2/3x2.2 mm |

GTQF Series**Voltage Controlled Oscillator CMOS Output**

| | |
|-----------------|-----------------|
| Frequency Range | 10 – 245.0MHz |
| Pulling Range | ±90ppm Min |
| Phase Jitter | 0.9pS Typical |
| Package Sizes | 7x5 and 5x3.2mm |

GTQN Series**Voltage Controlled Oscillator CMOS Output**

| | |
|-----------------|-----------------|
| Frequency Range | 10 – 245.0MHz |
| Pulling Range | ±90ppm Min |
| Phase Jitter | 0.6 pS Typical |
| Package Sizes | 7x5 and 5x3.2mm |

GPQF Series**Voltage Controlled Oscillator – PECL Output**

| | |
|-----------------|-----------------|
| Frequency Range | 10MHz – 1450MHz |
| Pulling Range | ±90ppm Min |
| Phase Jitter | 0.9pS Typical |
| Package Sizes | 7x5 mm |

GPQN Series**Voltage Controlled Oscillator – PECL Output**

| | |
|-----------------|-----------------|
| Frequency Range | 10MHz – 1450MHz |
| Pulling Range | ±90 - 200ppm |
| Phase Jitter | 0.6pS Typical |
| Package Sizes | 7x5 and 5x3.2mm |

GDQF Series**Voltage Controlled Oscillator – LVDS Output**

| | |
|-----------------|-------------------|
| Frequency Range | 10MHz – 1450.0MHz |
| Pulling Range | ±100ppm |
| Phase Jitter | 1.2pS Typical |
| Package Sizes | 7x5 and 5x3.2mm |

GDQN Series**Voltage Controlled Oscillator – LVDS Output**

| | |
|-----------------|-------------------|
| Frequency Range | 10MHz – 1450.0MHz |
| Pulling Range | ±100ppm |
| Phase Jitter | 0.6pS Typical |
| Package Sizes | 7x5 and 5x3.2mm |

XO Series**Standard Clock Oscillator – CMOS output**

| | |
|---------------------|-------------------------|
| Frequency Range | 156kHz – 160MHz |
| Supply Voltage | 1.8V to 5V |
| Current Consumption | 4.0mA – 35.0mA |
| Package Sizes | 7x5/ 5x3.2/3x2.2/2x1 mm |

XOY Series**Standard Clock Oscillator – Wide Temp Range**

| | |
|-------------------|----------------------|
| Frequency Range | 1.25MHz – 50MHz |
| Supply Voltage | 1.8V to 3.3V |
| Temperature Range | -55 +125°C |
| Package Sizes | 7x5 /5x3.2mm/3.2x2.5 |

HCJF Series**Standard Clock Oscillator – Quad Select Output**

| | |
|-----------------|------------------|
| Frequency Range | 15MHz – 2.1GHz |
| Supply Voltage | 1.8V/ 2.5V/ 3.3V |
| Start Up | 10 mSec Max |
| Package Sizes | 7x5 mm |

HTQF Series**Standard Clock Oscillator 6 pad**

| | |
|-----------------|------------------|
| Frequency Range | 10.0MHz – 245MHz |
| Supply Voltage | 2.5V to 3.3V |
| Phase Jitter | 0.9pS |
| Package Sizes | 7x5 and 5x3.2mm |

HTQN Series**Standard Clock Oscillator 6 pad**

| | |
|-----------------|-------------------|
| Frequency Range | 10.0MHz – 245MHz |
| Supply Voltage | 2.5V to 3.3V |
| Phase Jitter | 0.6pS (156.25MHz) |
| Package Sizes | 7x5 and 5x3.2mm |

Quick Turn**Standard Clock Oscillator XOPL Series**

| | |
|-----------------|-----------------|
| Frequency Range | 1.0MHz – 133MHz |
| Supply Voltage | 2.5V to 5.0V |
| Leadtime | 1 – 5 days |
| Package Sizes | 7x5 and 5x3.2mm |

EQHJ Series**Ultra Low Jitter Clock Oscillator**

| | |
|-----------------|----------------------|
| Frequency Range | 20.0MHz – 50.0MHz |
| Supply Voltage | 1.8V, 2.5V and 5.0V |
| Phase Jitter | 50fS Typical |
| Package Sizes | 7x5/5x3.2/3.2x2.5 mm |

OCXOs

OC51 Series

Made in Taiwan facility

9.7x7.5mm Smd OCXO

| | |
|-----------------|-----------------|
| Frequency Range | 10MHz – 40MHz |
| Input Voltage | 3.3V/5V |
| Stability | ±50ppb / ±20ppb |
| Phase Noise | -152dBc/Hz |

OC14 Series

Made in Taiwan facility

OCXO CMOS/True Sine

| | |
|-----------------|------------------|
| Frequency Range | 1.25MHz – 100MHz |
| Input Voltage | 3.3V/5V/12V |
| Stability | ±25ppb |
| Phase Noise | |

AXIOM15 Series

Made in Germany by Axtal

OCXO True Sine

| | |
|-----------------|----------------|
| Frequency Range | 80MHz – 125MHz |
| Input Voltage | 5V/12V |
| Stability | ±10ppb |
| Phase Noise | -170dBc/Hz |

AXIOM 5050 Series

Made in Germany by Axtal

OCXO True Sine Connectorized

| | |
|-----------------|----------------|
| Frequency Range | 80MHz – 125MHz |
| Input Voltage | 5V/12V |
| Stability | ±200ppb |
| Phase Noise | -183dBc/Hz |

YH1440 Series

Made in USA by Greenray Ind

OCXO True Sine (SC cut)

| | |
|-----------------|------------------------------|
| Frequency Range | 100MHz – 200MHz |
| Input Voltage | 5v, 12v or 15V |
| Stability | ±3x10 ⁻⁷ -40+70°C |
| Phase Noise | -160dBc/Hz |

YH1440 Series

Made in USA by Greenray Ind

Smd OCXO CMOS/True Sine

| | |
|-----------------|----------------|
| Frequency Range | 80MHz – 125MHz |
| Input Voltage | 3.3V/5V |
| Stability | ±100ppb |
| Phase Noise | -168dBc/Hz |

For more details see Website: www.euroquartz.co.uk

MILITARY & AEROSPACE

1000BM Series

Made in UK by Euroquartz

14 pin DIL Clock CMOS

| | |
|---------------------|---------------|
| Frequency Range | 10MHz – 40MHz |
| Input Voltage | 3.3V/5V |
| Stability | ±50ppm |
| Current Consumption | 10 ~ 70 mA |

75000 BM Series

Made in UK by Euroquartz

7x5mm smd Clock CMOS

| | |
|---------------------|----------------|
| Frequency Range | 1MHz – 60MHz |
| Input Voltage | 1.8V ~ 5V |
| Stability | ±50 ~ ±100ppm |
| Current Consumption | 7mA max (15pF) |

STXO Series

Made in USA by Statek Inc

3.2x2.5mm High Shock smd Clock

| | |
|---------------------|---------------|
| Frequency Range | 10MHz – 80MHz |
| Input Voltage | 2.5V/3V/3.3V |
| Current Consumption | 3mA |
| Phase Noise | -163 dBc/Hz |

CXOLHG Series

Made in USA by Statek Inc

3.2x2.5mm High Shock smd Clock

| | |
|---------------------|---------------|
| Frequency Range | 10MHz – 80MHz |
| Input Voltage | 2.5V/3V/3.3V |
| Current Consumption | 3mA |
| Phase Noise | -163 dBc/Hz |

T1307 Series

Made in USA by Greenray Ind

TCXO Ultra-low vibration sensitivity

| | |
|---------------------|-----------------|
| Frequency Range | 10MHz – 50MHz |
| Input Voltage | 3.3V, 5V or 12V |
| Current Consumption | 6mA max |
| Phase Noise | -157dBc/Hz |

YH1300 Series

Made in USA by Greenray Ind

OCXO Ultra-low vibration sensitivity

| | |
|-------------------|------------------------|
| Frequency Range | 10MHz – 50MHz |
| Input Voltage | 3.3V or 5V |
| Low g sensitivity | 5x10 ⁻¹¹ /g |
| Phase Noise | -165dBc/Hz |

In-House UK Production
The only UK Crystal Manufacturer



Euroquartz Production

EURO **QUARTZ**



OFF-SHORE PRODUCTION



STRATEGIC PARTNERS



SPECIALIST SOURCES



REDUCED VENDOR BASE

For more details see Website: www.euroquartz.co.uk

AS9100 Rev D Approved

HC50/HC49U/UM1 crystals

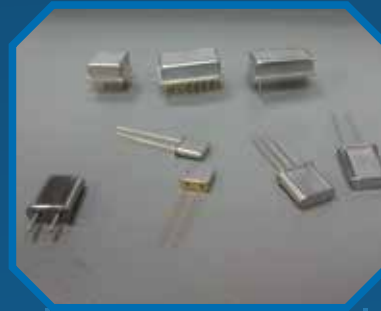
DIL Military Clocks

In House screening facilities

The MIL-PRF-55310 rev E

Quartz Crystal Filters

Fast Turn oscillators



Crystals and Oscillators



Military Oscillators

In-house production in the UK

Reserved space in factories used for 20 years

Euroquartz interface at a design level

Access to specialist manufacturers

Parts supplied from same factory **every time**

Class 7 Cleanroom

For more details see Website: www.euroquartz.co.uk

EUROQUARTZ

Still making crystals in the UK



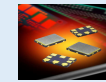
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| Part Reference | Output | Frequency Range | Temp Range | Package Sizes (mm) | Voltage Input | Jitter | Phase Noise | Country Of Origin |
|---------------------------------|--------------------|-------------------|------------|--|---------------|--------------|--------------------|-------------------|
| CLOCK | | | | | | | | |
| XO Series | CMOS | 312kHz to 160MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 / 2.0x1.6 | 1.0V to 3.3V | - | - | Taiwan |
| XOA Series | CMOS | 27.3kHz to 100kHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 5.0V | - | - | Taiwan |
| EQHJ Series | CMOS | 12kHz to 20MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 3.3V | 45fsec typ | - | Taiwan |
| XOY Series | CMOS | 1.25MHz to 50MHz | -40+125°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 3.3V | 150 fsec | -161dB/Hz @ 100kHz | Taiwan |
| EHTF series Fast Turn | CMOS | 1MHz to 200MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 / 2.0x1.6 | 1.8V to 3.3V | 0.9psec | - | Taiwan |
| EH_JF Ultra-low jitter | CMOS | 12kHz to 20MHz | -40+85°C | 7x5/ 5x3.2 | 1.8V to 3.3V | 115fsec typ | - | Taiwan |
| XOPL series Fast Turn | CMOS | 1MHz to 133MHz | -40+85°C | 7x5/ 5x3.2/14 x9.8 | 2.7V to 5.0V | 65psec typ | - | UK |
| ECQF series dual switchable | CMOS | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | - | - | Taiwan |
| EQHW Embedded Buffer | CMOS | 10MHz to 40MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 90fsec typ | - | Taiwan |
| LOW EMI | | | | | | | | |
| EQHM_R Series | CMOS | 3.5MHz to 165MHz | -40+85°C | 7x5/ 5x3.2 | 3.3V | - | - | Taiwan |
| EQHM_B Series | CMOS | 3.0MHz to 200MHz | -40+85°C | 7x5/ 5x3.2 | 3.3V | - | - | Taiwan |
| DIFFERENTIAL OSCILLATORS | | | | | | | | |
| HCK series | HCSL | 13.5MHz to 220MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 3.3V | 0.2psec typ | -144dB/Hz @ 100kHz | Taiwan |
| HDK series | LVDS | 13.5MHz to 220MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 3.3V | 0.2psec typ | -144dB/Hz @ 100kHz | Taiwan |
| HPK series | PECL | 13.5MHz to 220MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 3.3V | 0.2psec typ | -144dB/Hz @ 100kHz | Taiwan |
| H_QF series Fast Turn | LVDS/PECL | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 1psec typ | -110dB/Hz @100kHz | Taiwan |
| H_QN series | LVDS/PECL | 150MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 0.6psec typ | -120dB/Hz @100kHz | Taiwan |
| EQJF series Fast Turn | LVDS/PECL/HCSL/CML | 150MHz to 2.1GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 155fsec | - | Taiwan |
| ECQF series Fast Turn | LVDS/PECL | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 1.5pS typ | - | Taiwan |
| VCXOs | | | | | | | | |
| G series - 4 pad | CMOS | 1.25MHz to 50MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 3.3V | 1psec max | -152dB/Hz @100kHz | Taiwan |
| G_QN series | CMOS/ LVDS/PECL | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 0.6psec typ | -129dB/Hz @100kHz | Taiwan |
| G_QF series Fast Turn | LVDS/PECL/HCSL/CML | 15MHz to 2.1GHz | -40+85°C | 7x5/ 5x3.2 | 1.8V to 3.3V | 150fsec typ | - | Taiwan |
| EGC_QF switchable series | CMOS/ LVDS/PECL | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 2.5V to 3.3V | 1.5psec | - | Taiwan |
| TCXOs and VCTCXOs | | | | | | | | |
| EM_S series | Clipped Sine | 6.4MHz to 52MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 / 2.0x1.6 | 1.8V to 3.3V | - | -148dB/Hz @100kHz | Taiwan |
| EM_T kHz series | CMOS | 32.768kHz | -40+85°C | 7x5 | 3.3V | - | - | Taiwan |
| EM_T series | CMOS | 6.4MHz to 60MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5/ 2.5x2.0 | 1.8V to 5V | - | - | Taiwan |
| EME32T | CMOS | 32.768kHz | -40+85°C | 3.2x2.5 | 2.5V to 3.3V | - | - | Taiwan |
| EMQN series | CMOS/ LVDS/PECL | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2 | 2.5V to 3.3V | 0.8psec typ | -125dB/Hz @100kHz | Taiwan |
| EMQF series Fast Turn | CMOS/LVDS/PECL | 10MHz to 1.5GHz | -40+85°C | 7x5/ 5x3.2 | 2.5V to 3.3V | 1.5psec typ | -117dB/Hz @100kHz | Taiwan |
| EMJF series Fast Turn | LVDS/PECL/HCSL/CML | 10MHz to 2.1GHz | -40+85°C | 5x3.2 | 2.5V to 3.3V | 300fs typ | - | Taiwan |
| EM__T series | CMOS | 9.5MHz to 60MHz | -40+85°C | 3.2x2.5/ 2.5x2.0 / 2.0x1.6 | 1.8V to 3.3V | 0.3psec typ | -154dB/Hz @100kHz | Taiwan |
| EMTF series | CMOS | 1MHz to 200MHz | -40+85°C | 7x5/ 5x3.2/ 3.2x2.5 | 1.8V to 3.3V | 1.2 psec typ | -119dB/Hz @100kHz | Taiwan |
| EMVJF series High pulling | LVDS/PECL/HCSL/CML | 15MHz to 1.3GHz | -40+85°C | 5x3.2 | 1.8V to 3.3V | - | - | Taiwan |
| OCXOs | | | | | | | | |
| OC12 series smd | CMOS/ True Sine | 5MHz to 40MHz | -40+85°C | 25.4 x 22.1 | 3.3V and 5V | - | -152dB/Hz @10kHz | Taiwan |
| OC18T series - leaded | CMOS | 5MHz to 40MHz | -40+85°C | 20.6 x 20.6 | 3.3V and 5V | - | -150dB/Hz @10kHz | Taiwan |
| OC32 series leaded | CMOS/ True Sine | 5MHz to 40MHz | -40+85°C | 36.3 x 37.2 | 3.3V and 5V | - | -150dB/Hz @10kHz | Taiwan |
| OC41T series smd | CMOS | 5MHz to 40MHz | -40+85°C | 15.4x10.4 | 3.3V | - | -152dB/Hz @10kHz | Taiwan |
| OC51 miniature | CMOS/ Clipped Sine | 10MHz to 40MHz | -40+85°C | 9.7 x 7.5 | 3.3V and 5V | - | -152dB/Hz @10kHz | Taiwan |

| Part Reference | Output | Frequency Range | Temp Range | Package Sizes (mm) | Voltage Input | Jitter | Phase Noise | Country Of Origin |
|--------------------------|--------------------|--------------------|------------|----------------------|---------------|------------------------|-------------------|--------------------|
| CLOCK OSCILLATORS | | | | | | | | |
| EQXO-75BM series | CMOS | 1MHz to 60MHz | -55 +125°C | 7x5 | 1.8V to 3.3V | 150fsec typ | -153dB/Hz @ 10kHz | UK |
| EQXO-75UIE series | CMOS | 1MHz to 60MHz | -40 +105°C | 7x5 | 1.8V to 3.3V | 150fsec typ | -153dB/Hz @ 10kHz | UK |
| EQXO-1000BM series | CMOS | 30kHz to 70MHz | 55 +125°C | DIP14 non-RoHS | 2.8V to 5V | - | -159dB/Hz @ 10kHz | UK |
| EQXO-1000XN series | CMOS | 1.75MHz to 60MHz | 55 +125°C | DIP14 RoHS | 1.8V to 3.3V | - | - | UK |
| EQXO-2000BM series | CMOS | 1.75MHz to 60MHz | 55 +125°C | DIP8 non-RoHS | 1.8V to 3.3V | - | -159dB/Hz @ 10kHz | UK |
| EQXO-2000XN series | CMOS | 1.75MHz to 60MHz | 55 +125°C | DIP8 RoHS | 1.8V to 3.3V | - | - | UK |
| CXOLHG 100,000G | CMOS | 16kHz to 32.768kHz | -55 +125°C | 3.2 x 1.5 | 1.8V to 3.3V | - | - | USA by Statek Corp |
| CXOLHT 100,000G | CMOS | 16kHz to 50MHz | -55 +200°C | 3.2 x 1.5 | 2.5V to 5V | - | - | USA by Statek Corp |
| CXOMKHG 100,000G | CMOS | 200kHz to 200MHz | -55 +125°C | 6.5 x 5 | 0.9V to 5V | - | - | USA by Statek Corp |
| CXOQHG 75,000G | CMOS | 16kHz to 100MHz | -55 +125°C | 2.5 x 2 | 1.8V to 5V | - | - | USA by Statek Corp |
| LHGAT 30,000G | CMOS | 320kHz to 50MHz | -55 +125°C | 7x5 (special leaded) | 1.8V to 5V | - | - | USA by Statek Corp |
| HGXO 100,000G | CMOS | 32.768kHz to 50MHz | -55 +125°C | 7.5 x 5 | 1.8V to 5V | - | - | USA by Statek Corp |
| STXOHG 100,000G | CMOS | 10MHz to 70MHz | -55 +125°C | 3.2 x 2.5 | 2.5V to 5V | 100fsec typ | -153dB/Hz @ 10kHz | USA by Statek Corp |
| CXOX 100,000G | CMOS | 16kHz to 160MHz | -55 +125°C | 3.2 x 2.5 | 1.8V to 3.3V | 350fsec typ | -142dB/Hz @ 10kHz | USA by Statek Corp |
| CXOXLPN 100,000G | CMOS | 10MHz to 125MHz | -55 +125°C | 3.2 x 2.5 | 1.8V to 5V | 210fsec typ | -153dB/Hz @ 10kHz | USA by Statek Corp |
| CXOLP 10,000G | CMOS | 1MHz to 8.5MHz | -55 +125°C | 3.2 x 1.5 | 1.8V to 3.3V | - | - | USA by Statek Corp |
| CXOXLPNR Space 30kRad | CMOS | 20MHz to 125MHz | -55 +125°C | 3.2 x 2.5 | 1.8V to 3.3V | - | - | USA by Statek Corp |
| LVDS | Differential ouput | 10MHz to 160MHz | -55 +125°C | 5.0 x 3.2 | 2.5V to 3.3V | 1psec | -144dB/Hz @ 10kHz | USA by Statek Corp |
| TCXOs | | | | | | | | |
| T56 series | CMOS/Clipped Sine | 10MHz to 52MHz | -55 +125°C | 5x3.2 | 3V to 3.6V | - | -150dB/Hz | USA by Greenray |
| T58 series 30,000G | CMOS/Clipped Sine | 10MHz to 52MHz | -40+85°C | 5x3.2 | 3V to 3.6V | - | - | USA by Greenray |
| T75 series | CMOS/Clipped Sine | 10MHz to 50MHz | -55 +95°C | 7.0 x 5 | 3.3V | - | - | USA by Greenray |
| T77 series | Sinewave | 10MHz to 50MHz | -55 +95°C | 7.0 x 5 | 3.3V | - | - | USA by Greenray |
| T1215 series | CMOS/LVDS/PECL | 750kHz to 800MHz | -55 +95°C | 9.1 x 7.5 | 2.7V to 3.6V | - | - | USA by Greenray |
| T1244 series | LVPECL | 50MHz to 150MHz | -55 +95°C | 14.2 x 9.1 | 3.3V | - | -154dB/Hz | USA by Greenray |
| T1254 TCXO for Space | - | 30kRad | -55 +125°C | 14 pin | - | - | - | USA by Greenray |
| T1283 TCXO for Space | - | 50kRad | -55 +125°C | 25.4 x 25.4 | - | - | - | USA by Greenray |
| T1276 TCXO for Space | - | 200kRad | -55 +125°C | 20.3 x 12.7 24 pin | 3V to 3.6V | - | -160dB/Hz | USA by Greenray |
| T1308 series | CMOS/Clipped Sine | 10MHz to 50MHz | -55 +125°C | 9.1 x 7.5 | 3.3V | - | -160dB/Hz | USA by Greenray |
| ZT600 Series | CMOS / Sinewave | 10MHz to 500MHz | -40+85°C | 29.21 x 25.40 | 2.2 to 5V | - | -150dB/Hz @ 10kHz | USA by Greenray |
| OCXOs | | | | | | | | |
| YH1300 series | CMOS/True Sine | 10MHz to 50MHz | -40+85°C | 20.3 x 12.7 6 pin | 3V to 12V | - | -154dB/Hz | USA by Greenray |
| Y1320 series | | 10MHz to 120MHz | -40+85°C | 50.8 x50.8 | 12V & 15V | | -168dB/Hz | USA by Greenray |
| YH1400 series | CMOS/True Sine | 10MHz to 125MHz | -40+85°C | 25.4 x 25.4 | 5V | 100 x10 ⁻¹⁵ | -163dB/Hz | USA by Greenray |
| YH1486 series | True Sine | 10MHz to 20MHz | -20+60°C | 25.4 x 25.4 | 10V to 15V | - | -158dB/Hz | USA by Greenray |
| VCXO | | | | | | | | |
| N630 | True Sine | 50MHz to 130MHz | -40+85°C | 17.3 x 17.3 smd | 5V | - | -160dB/Hz | USA by Greenray |