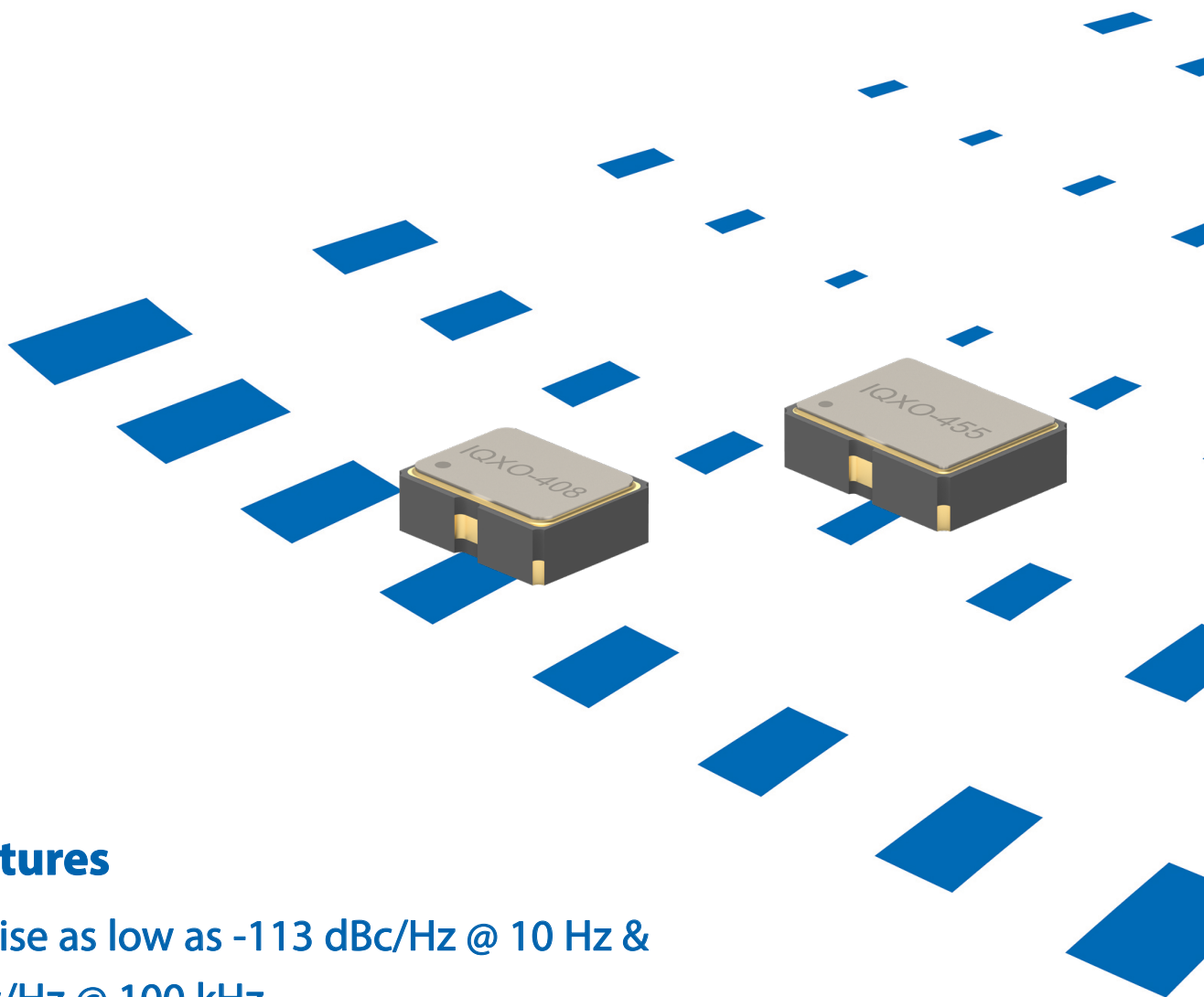




## Low phase noise oscillators

- IQXO-408
- IQXO-455



### Key Features

Phase noise as low as  $-113$  dBc/Hz @ 10 Hz &  
 $-175$  dBc/Hz @ 100 kHz

Supply Voltages 1.8 V, 2.5 V & 3.3 V

Industry standard packages of 2.5 x 2.0 mm & 3.2 x 2.5 mm

# Low phase noise oscillators

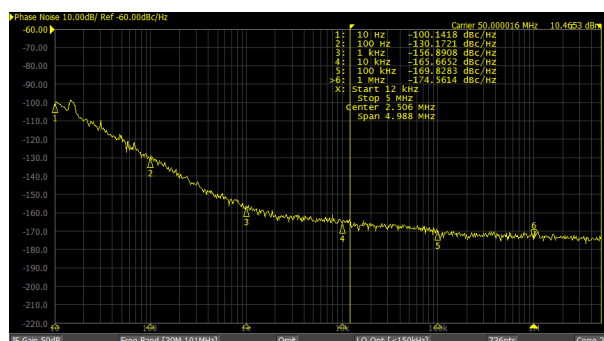
As application requirements drive the need for greater data rates, more oscillator devices with ultra-low phase noise are required. This type of application is especially prevalent in today's connected world.

IQD is pleased to launch its newest low phase noise oscillators, the IQXO-408 & IQXO-455, available in industry standard packages of 2.5 x 2.0 mm and 3.2 x 2.5 mm.

The new CMOS clock oscillators can perform with a close in phase noise as low as -113 dBc/Hz @ 10 Hz and far out phase noise as low as -175 dBc/Hz @ 100 kHz (3.3 V, 20 MHz, IQXO-408). The low phase noise oscillators are available at either 1.8 V, 2.5 V or 3.3 V with a phase jitter down to 40 fs RMS (over 12 kHz to 5 MHz).

## Specification

- Package sizes (SMD):  
2.5 x 2.0 mm  
3.2 x 2.5 mm
- Frequency range: 20 to 50 MHz
- ±25 ppm over -40 to 85 °C
- 1.8 V, 2.5 V & 3.3 V supply voltage
- CMOS output



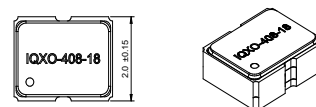
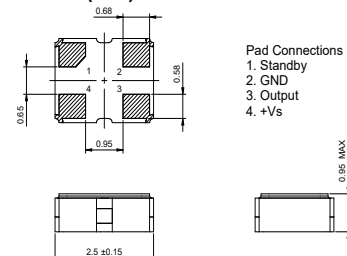
## Applications

- High data rate applications
- IoT
- 5G base stations
- PLL
- Frequency multiplier
- Clock recovery
- Gigabit Ethernet
- Fibre transceivers
- Studio grade and high-end consumer audio equipment

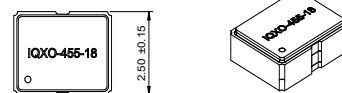
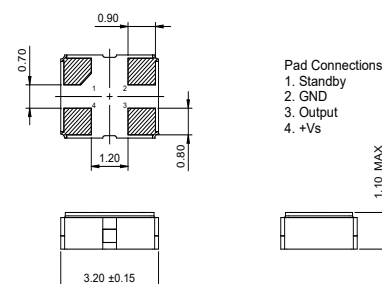
## Parts available:

Model	Part Number	Package Size	Output	Frequency	Stability	Operating Temp. Range	Voltage
IQXO-455	LFSPXO084652	3.2 x 2.5 x 0.95 mm	CMOS	24 MHz	±25 ppm	-40 to 85 °C	1.8 V
IQXO-455	LFSPXO084654	3.2 x 2.5 x 0.95 mm	CMOS	25 MHz	±25 ppm	-40 to 85 °C	1.8 V
IQXO-455	LFSPXO084655	3.2 x 2.5 x 0.95 mm	CMOS	38.4 MHz	±25 ppm	-40 to 85 °C	1.8 V
IQXO-455	LFSPXO084656	3.2 x 2.5 x 0.95 mm	CMOS	50 MHz	±25 ppm	-40 to 85 °C	1.8 V
IQXO-455	LFSPXO084657	3.2 x 2.5 x 0.95 mm	CMOS	24 MHz	±25 ppm	-40 to 85 °C	3.3 V
IQXO-455	LFSPXO084658	3.2 x 2.5 x 0.95 mm	CMOS	25 MHz	±25 ppm	-40 to 85 °C	3.3 V
IQXO-455	LFSPXO084659	3.2 x 2.5 x 0.95 mm	CMOS	38.4 MHz	±25 ppm	-40 to 85 °C	3.3 V
IQXO-455	LFSPXO084660	3.2 x 2.5 x 0.95 mm	CMOS	50 MHz	±25 ppm	-40 to 85 °C	3.3 V

## Outline (mm)



IQXO-408



IQXO-455

For other specifications please contact IQD.

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