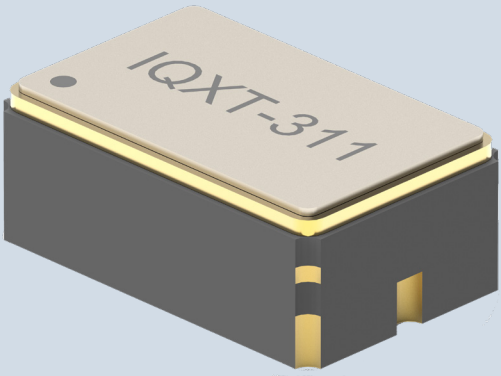
IQD



LOW PHASE NOISE OSCILLATORS

For optimum signal quality and accuracy

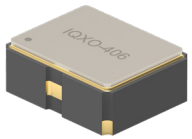
Phase noise can be defined as the short term, random fluctuations in the oscillator's frequency domain. For some applications maximum clarity and low phase noise is critical. Such applications include: Wireless communications, radar systems, test & measurement, high-speed data communications such as DAB, fibre-optic networks, and GNSS receivers, including GPS, GLONASS, Galileo and BeiDou systems. In fact, any application that demands precise frequency control, high signal quality, and low interference can benefit from the use of low phase noise oscillators.

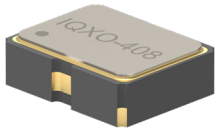
EST. 1973

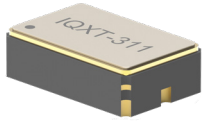
To find out more visit: IQDfrequencyproducts.com
T: +44 (0) 1460 270200 E: info@IQDfrequencyproducts.com

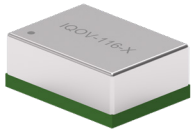
Contact our experts

Call our technical support team for advice on the right part for your design







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	IQXO-406 & IQXO-439	IQXO-408 & IQXO-455	IQXT-311	IQOV-116	IQOV-210F	IQOV-220	IQRB-2
Lowest Phase Noise Performance	**Highest frequency SPXOs with lowest phase noise**	**SPXOs with lowest phase noise**	**TCXO with lowest phase noise**	**Smallest SMD OCXO with lowest phase noise**	**OCXO with lowest phase noise floor**	**OCXO with lowest close-in phase noise**	**Rubidium XO with lowest phase noise**
Package Size (mm)	2.0 x 1.6 x 0.8	2.5 x 2.0 x 0.95 (408) 3.2 x 2.5 x 1.1 (455)	5.0 x 3.2 x 2.4	7.5 x 5.5 x 3.3	25.4 x 25.4 x 13.5	36.0 x 27.0 x 15.0	101.2 x 60.7 x 37.7
Frequency Range	50 to 250 MHz	20 to 50 MHz	1.25 to 52 MHz	10 to 20 MHz	100 MHz	10 MHz	10 MHz
Stability	50 ppm	25 ppm	50 ppb	0.02 - 0.05 ppm	10 ppb	0.5 ppb	0.3 ppb
Supply Voltage	2.5 & 3.3 V	1.8, 2.5 & 3.3 V	3, 3.3 & 5 V	3.3 V	5 & 12 V	12 V	12 V
Power Draw Output	40 mA	10 mA	2 mA (C-Sine) 4 mA (CMOS)	600 mA	2 W	1.2 W	6 W
Compatibility	LVDS/LVPECL	CMOS	CMOS, Clipped Sine	CMOS	Sinewave	Sinewave	Sinewave
Phase Noise (typ)	125 MHz 3.3 V	20 MHz 3.3 V	19.2 MHz	10 MHz	100 MHz 12 V	10 MHz 12 V	10 MHz 12 V
1 Hz			-70	-65		-118	-113
10 Hz	-64	-113	-96	-100	-110	-140	-138
100 Hz	-94	-140	-130	-130	-140	-152	-152
1 kHz	-124	-158	-147	-150	-165	-155	-155
10 kHz	-145	-166	-154	-155	-176	-160	-158
100 kHz	-153	-175	-156	-155	-180	-160	-158
1 MHz	-154	-175	-157	-155			-153

*images not to scale

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IQD Technical Support Services

We have a dedicated engineering and application test facility in the UK exclusively to support our customers, including:

- Crystal parameters including FR, FL, CO, C1, Trim, R1
- Oscillator parameters including F, current draw, output characteristics
- Frequency behaviours over temperature (stability)
- Phase noise and phase jitter
- Short-term stability
- Accelerated ageing
- Circuit characterisation
- MTIE/TDEV testing

About IQD

IQD offers one of the most comprehensive frequency product ranges available; from low cost commercial grade timing devices to those used in high reliability industrial and extended temperature applications including: Quartz Crystals, Clock Oscillators, Crystals & Oscillators qualified to AEC-Q200, VCXOs, TCXOs, VCTCXOs, OCXOs, GPS Disciplined OCXOs, and Rubidium Oscillators.

IQD has been a recognised market leader in the frequency products market since 1973. The company has invested in its design and technical measurement capabilities at its head office in the UK, which also acts as the centre of excellence for frequency products within the Würth Elektronik eiSos Group. This service, combined with excellent product quality and reliability,

IQD

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