

IQXO-350 Commercial Oscillator

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Delivery Options

- Common frequencies are available from stock, please contact our sales office for current leadtimes

Output Compatibility

- HCMOS/TTL/LSTTL
- Drive Capability: 50pF or 10TTL (<70.0MHz)
30pF (≥70.0 to 160.0MHz)
(1.0 to < 100.0kHz 15pF or 10 LSTTL only)

Package Outline

- 14-pin DIL compatible resistance welded enclosure, hermetically sealed with glass to metal seal. Available over 0 to 70°C (IQXO-350) or -40 to 85°C (IQXO-350I)

Standard Frequency Stabilities

- ±25ppm, ±50ppm, ±100ppm
(over operating temperature range)

Operating Temperature Ranges

- 0 to 70°C (IQXO-350)
- 40 to 85°C (IQXO-350I)

Storage Temperature Range

- 55 to 125°C

Environmental Specification

- Terminal Strength: 0.91kg max. Force perpendicular to top & bottom
- Hermetic Seal: not to exceed 1×10^{-8} mBar litres of Helium leakage
- Solderability: MIL-STD-202E, Method 208C
- Vibration: 10 to 55Hz 0.76mm displacement, sweep 60 seconds, duration 2 hours
- Rapid Change of Temperature over Operating Temperature Range: 10 cycles
- Shock: 981m/s² for 6ms, three shocks in each direction along the three mutually perpendicular planes

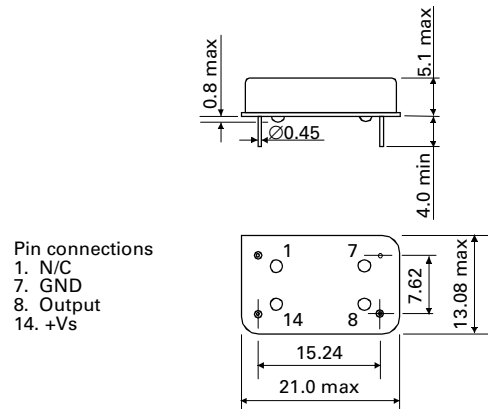
Marking

- Model number + Operating Temperature Code (if applicable)
- Frequency Stability Code
- Frequency Tolerance Code (Optional)
- Frequency
- Date Code (Year/Week)

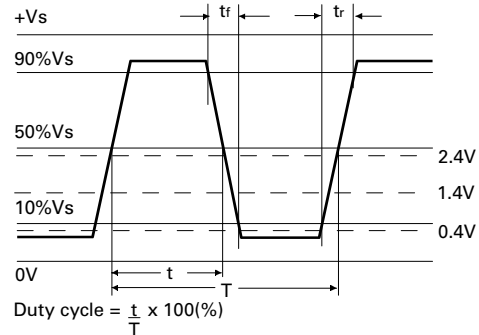
Minimum Order Information Required

- Frequency + Model Number + Operating Temperature (if applicable) + Frequency Stability

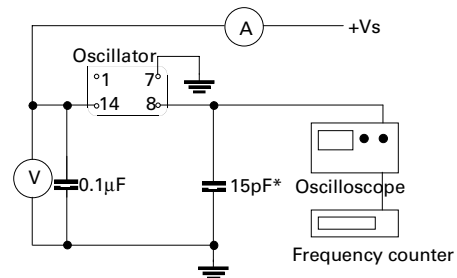
Outline in mm



Output Waveform - HCMOS/TTL



Test Circuit - HCMOS



*Inclusive of jigging & equipment capacitance

Electrical Specifications - maximum limiting values when measured in HCMOS test circuit.

Frequency Range	Frequency Stability	Supply Voltage	Supply Current	*Rise Time(t_r)	*Fall Time(t_f)	**Duty Cycle	Model Number
1.0 to < 100.0kHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	10mA	10ns	10ns	45/55%	IQX0-350, -350I
100.0 to < 250.0kHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	10mA	15ns	15ns	45/55%	IQX0-350, -350I
250.0kHz to < 5.0MHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	30mA	15ns	15ns	45/55%	IQX0-350, -350I
5.0 to < 16.0MHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	15mA	10ns	10ns	45/55%	IQX0-350, -350I
16.0 to < 30.0MHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	30mA	10ns	10ns	45/55%	IQX0-350, -350I
30.0 to < 50.0MHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	40mA	8ns	8ns	45/55%	IQX0-350, -350I
50.0 to < 70.0MHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	50mA	6ns	6ns	40/60%	IQX0-350, -350I
70.0 to 160.0MHz	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$5V \pm 0.25V$	70mA	5ns	5ns	40/60%	IQX0-350, -350I

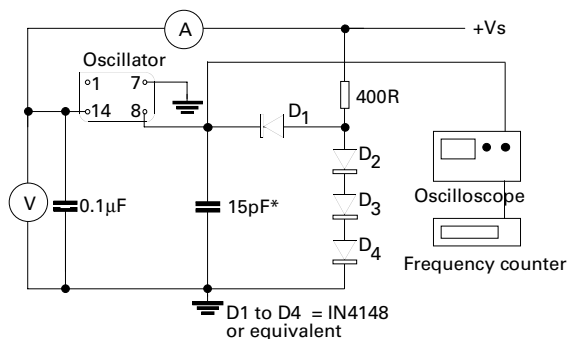
Ordering Example

Frequency 22.0MHz
 Model number: -350
 Operating Temperature Code: I = -40 to 85°C Not applicable for 0 to 70°C
 Frequency Stability: A = $\pm 25\text{ppm}$, B = $\pm 50\text{ppm}$, C = $\pm 100\text{ppm}$

Please note that the rise and fall times listed are the maximum values we specify to cover various frequency breaks. In practise the actual values are generally lower depending upon the spot frequency chosen. For typical values please contact our sales office.

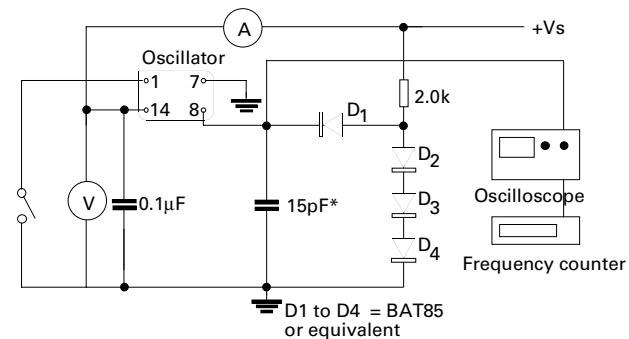
LEADED SPXOs

Test Circuit - TTL



*Inclusive of jigging & equipment capacitance

Test Circuit - LSTTL



*Inclusive of jigging & equipment capacitance

Note: Pin 1 = No connection on non tri-state models