



ISSUE 20; August 2012 - RoHS 2011/65/EU

Description

- A standard 5.0V crystal oscillator in an 8-pin DIL hermetically sealed package without a standby function.
For parts that meet tougher environmental specifications please see our IQXO-35 range.
- For parts that meet tough environmental specifications and military temperature range please see our IQXO-85 range.
- For individually screened parts that meet tough environmental specifications and military temperature range please see our IQXO-86 range.
- Fast Make capability: CFPP-23 series programmable oscillators are the nearest equivalent fast make model.

Frequency Range

- Frequency 0.5 to 160.0 MHz

Supply Voltage

- Voltage 5.0V $\pm 0.25V$

Ageing

- Ageing $\pm 5\text{ppm}$ max per year

Output Compatibility & Load

- Output Compatibility HCMOS/TTL
- Drive Capability 50pF max or 10TTL (<70.0MHz)
30pF max (70.0 to 170.0MHz)

Frequency Stabilities

- Frequency Stability $\pm 25\text{ppm}$, $\pm 100\text{ppm}$
(inclusive of supply voltage and output load variations over the operating temperature range)

Operating Temperature Ranges

- 0 to 70°C
- -40 to 85°C

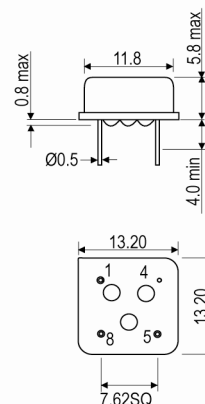
Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Terminal Strength: 0.91kg max force perpendicular to top and bottom
- Hermetic Seal: Not to exceed 1×10^{-8} mBar litres of Helium leakage
- Solderability: MIL-STD-202E, Method 208C
- Vibration: 0.76mm displacement, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane
- Rapid Change of Temperature over Operating Temperature Range: 10 cycles
- Shock: 981m/s², 6ms, 3 times in each of 3 mutually perpendicular planes

Ordering Information (*minimum required)

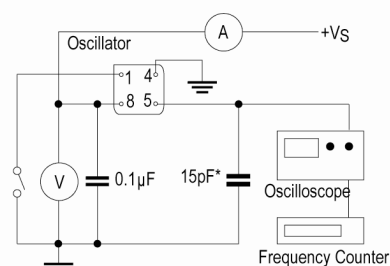
- Frequency*
- Model*
- Output
- Frequency Stability*
- Operating Temperature Range*
- Supply Voltage
- Example:
20.0MHz IQXO-22
HCMOS $\pm 50\text{ppm}$ 0 to 70C 5.0V

Outline (mm)



Pin Connections
1. N/C
4. GND
5. Output
8. +VS

Test Circuit



*Inclusive of jigging and equipment capacitance

Note: Pin 1 = No connection on non standby option models

Sales Office Contact Details:

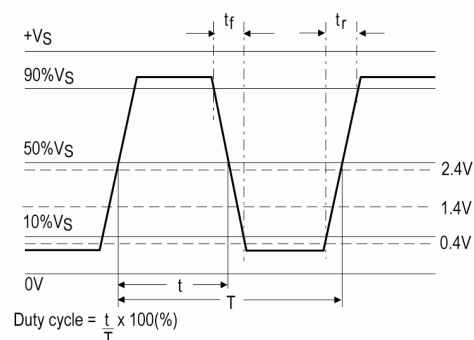
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**Packing Details**

- Pack Style: **Bulk** Loose in bulk pack
- Pack Size 40
- Alternative packing options available

Wave Form**Electrical Specification - maximum limiting values 5.0V \pm 0.25V**

Frequency Range	Temp Range	Stability Inclusive		Current Draw	Rise & Fall (10 to 90%)	Duty Cycle %
		Min	Max			
0.5 to 4.999999MHz	0 to 70°C	\pm 25ppm	\pm 100ppm	20.0mA	15ns	45/55%
	-40 to 85°C	\pm 25ppm	\pm 100ppm	20.0mA	15ns	45/55%
5.0 to 15.999999MHz	0 to 70°C	\pm 25ppm	\pm 100ppm	20.0mA	10ns	45/55%
	-40 to 85°C	\pm 25ppm	\pm 100ppm	20.0mA	10ns	45/55%
16.0 to 29.999999MHz	0 to 70°C	\pm 25ppm	\pm 100ppm	30.0mA	10ns	45/55%
	-40 to 85°C	\pm 25ppm	\pm 100ppm	30.0mA	10ns	45/55%
30.0 to 49.999999MHz	0 to 70°C	\pm 25ppm	\pm 100ppm	40.0mA	8ns	45/55%
	-40 to 85°C	\pm 25ppm	\pm 100ppm	40.0mA	8ns	45/55%
50.0 to 69.999999MHz	0 to 70°C	\pm 25ppm	\pm 100ppm	50.0mA	6ns	40/60%
	-40 to 85°C	\pm 25ppm	\pm 100ppm	50.0mA	6ns	40/60%
70.0 to 160.0MHz	0 to 70°C	\pm 25ppm	\pm 100ppm	70.0mA	5ns	40/60%
	-40 to 85°C	\pm 25ppm	\pm 100ppm	70.0mA	5ns	40/60%

This document was correct at the time of printing; please contact your local sales office for the latest version

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