



IQXO-74x

IQXO-74x

5 x 3.2mm ceramic SMD oscillator

Model Name	Description
IQXO-740	A 3.3V version
IQXO-741	A 2.5V version



ISSUE 1; November 2019

Electrical Specification - maximum limiting values 3.3V \pm 5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
80.0MHz	160.0MHz	0 to 70	\pm 20.0	66	0.7	45/55%
		-40 to 85	\pm 20.0	66	0.7	45/55%

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ISSUE 1; June 2019

Description

- 5 x 3.2mm ceramic SMD oscillator

Frequency Parameters

- Frequency: 80.0MHz to 160.0MHz
- Frequency Tolerance: $\pm 20.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Frequency Stability: $\pm 20.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing: $\pm 3\text{ppm}$ max per year @ 25°C

Electrical Parameters

- Supply Voltage: 2.5V $\pm 5\%$
- Start up time: 10ms max

Operating Temperature Ranges

- 0 to 70°C
- 40 to 85°C

Output Details

- Output Compatibility: LVDS
- Drive Capability: 100Ω
- Output Voltage Logic Low: 1.43V typical, 1.6V max
Output Voltage Logic High: 1.1V typical, 0.9V min
- Output Differential Voltage: 247mV to 454mV max, 350mV typical
- Output Offset Voltage: 1.125V to 1.375V max, 1.2V typical

Output Control

- Logic '1' to pad 1 (70%Vs min) enables oscillator outputs
Logic '0' to pad 1 (30%Vs max) disables oscillator outputs, oscillator outputs go to the high impedance state
No connection to pad 1 enables oscillator outputs

Noise Parameters

- Phase Jitter (12kHz to 20MHz): 1ps rms max

Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Drop: 120cm drop (3 times) onto hard wooden board
- Vibration: MIL-STD-883, Method 2007, Test Condition A:
10Hz-55Hz-10Hz, 1.5mm amplitude, full sine, 2mins per cycle,
3 mutually perpendicular planes, 2hrs duration in each plane

Ordering Information

- Frequency*
- Model*
- Output
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Supply Voltage
(*minimum required)
- Example
100.0MHz IQXO-741
LVDS $\pm 50\text{ppm}$ 0 to 70C 2.5V

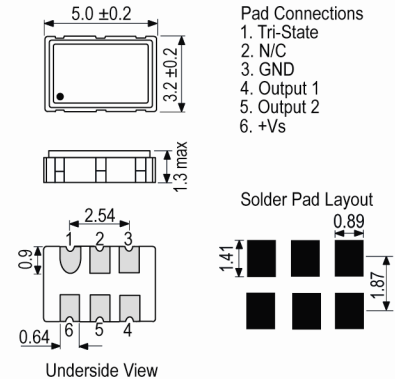
Compliance

- RoHS Status (2015/863/EU): Compliant
- REACH Status: Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

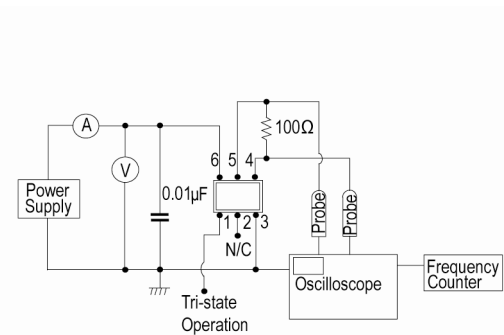
Packaging Details

- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000

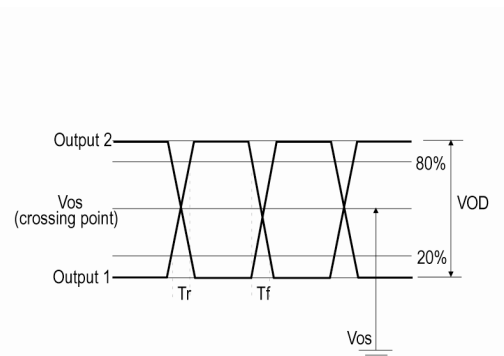
Outline (mm)



Test Circuit



Wave Form



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Electrical Specification - maximum limiting values 2.5V \pm 5%

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
80.0MHz	160.0MHz	0 to 70	\pm 20.0	66	0.7	45/55%
		-40 to 85	\pm 20.0	66	0.7	45/55%

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