VCTCXO Specification
IQXT-192

ISSUE 1; April 2016

Description

- A temperature compensated crystal oscillator with voltage control in a hermetically sealed surface mount package

Frequency Parameters

- Frequency 8.192MHz to 52.0MHz
- Frequency Tolerance ±2.50ppm
- Tolerance Condition @ 25°C ±2°C
- Frequency Stability ±1.00ppm to ±2.50ppm
- Ageing ±1ppm max per year @ 25°C
- Supply Voltage Variation (±5% change): ±0.2ppm
- Load Variation (±5% change): ±0.2ppm

Electrical Parameters

- Supply Voltage Options (±5%):
  1.8V, 2.5V, 2.8V, 3.0V & 3.3V

Frequency Adjustment

- Pulling ±5ppm min
- Control Voltage 50%Vs ±50%Vs

Operating Temperature Ranges

- -30 to 85°C

Output Details

- Output Compatability Clipped Sine
- Drive Capability 10kΩ//10pF
- Output Voltage Level: 0.8V pk-pk min

Noise Parameters

- Phase Noise (typ @ 20MHz):
  -90dBc/Hz @ 10Hz
  -115dBc/Hz @ 100Hz
  -128dBc/Hz @ 1kHz
  -145dBc/Hz @ 10kHz
  -149dBc/Hz @ 100kHz
  -150dBc/Hz @ 1MHz

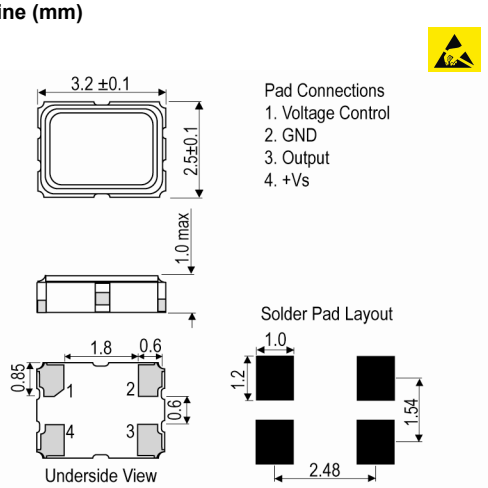
Environmental Parameters

- Storage Temperature Range: -40 to 85°C
- Drop: JIS-C-6701: 75cm drop (3 times) onto hard wooden board
- Vibration: MIL-STD-883, Method 2007.2: 20G (20Hz-2000Hz), 1.5mm amplitude, in 3 mutually perpendicular planes, 4mins for each cycle

Ordering Information

- Frequency*
  Model*
  Output
  Frequency Stability (over operating temperature range)*
  Operating Temperature Range*
  Supply Voltage*
  Frequency Adjustment
  (minimum required*)
- Example
  16.0MHz IQXT-192-1
  Clipped Sine ±2.5ppm -30 to 85C 3.3V ±5ppm min

Outline (mm)



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Compliance

- RoHS Status (2011/65/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: 3,000

Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Current Draw	Rise and Fall Time	Duty Cycle
		°C	ppm	mA	ns	%
8.192MHz	52.0MHz	-30 to 85	±1.0	2	-	-

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