



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## Description

- Standard 2.5 x 2.0 oscillator in a ceramic package with a hermetically sealed metal lid.
- Model IQXO-791
- Model Issue number 1

## Frequency Parameters

- Frequency 13.0MHz
- Frequency Stability  $\pm 50.00\text{ppm}$
- Operating Temperature Range  $-40.00$  to  $85.00^\circ\text{C}$
- Ageing  $\pm 3\text{ppm}$  max per year @  $25^\circ\text{C}$

## Electrical Parameters

- Supply Voltage  $3.3\text{V} \pm 10\%$
- Current Draw  $10.000\text{mA}$

## Output Details

- Output Compatibility HCMOS
- Drive Capability  $15\text{pF}$
- Rise and Fall Time  $10.0\text{ns}$  max
- Duty Cycle 40/60
- Output Voltage Levels:  
Output Low (VoL):  $10\%V_s$  max  
Output High (VoH):  $90\%V_s$  min
- Start Up Time:  $10\text{ms}$  max

## Output Control

- Stand-by Operation:  
Logic '1' ( $\geq 70\% V_s$ ) to pad 1 enables oscillator output.  
Logic '0' ( $\leq 30\% V_s$ ) to pad 1 disables oscillator output; when disabled the oscillator output goes to the high impedance state.  
No connection to pad 1 enables oscillator output.
- Stand-by Current:  $10\mu\text{A}$  max

## Noise Parameters

- Period Jitter (pk-pk):  $\pm 80\text{ps}$  typ
- Period Jitter ( $1\sigma$ ):  $\pm 10\text{ps}$  typ
- Phase Jitter (12kHz to 20MHz):  $1\text{ps}$  rms max

## Environmental Parameters

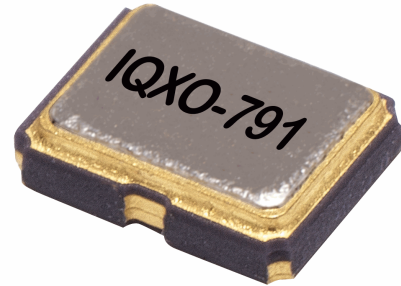
- Storage Temperature Range:  $-55$  to  $125^\circ\text{C}$
- Shock: MIL-STD-202, Method 213. Or comparable.
- Vibration: MIL-STD-883, Method 2007, Condition A. Or comparable.

## Manufacturing Details

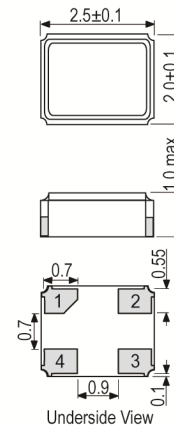
- Maximum Process Temperature:  $260^\circ\text{C}$  (10secs max)
- Note: Do not connect inductor or bead between pad 2 and GND as it can make the output unstable.
- RoHS Terminations
- RoHS Reflow Temp  $260^\circ\text{C}$  max for 10secs max

## Compliance

- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable



## Outline (mm)

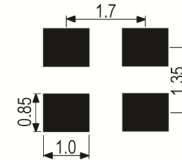


### Pad Connections

- Enable/Disable
- GND
- Output
- +Vs

Note: Connect bypass capacitor  $0.1\mu\text{F}$  or  $0.01\mu\text{F}$  between +Vs and GND

### Solder Pad Layout



## Sales Office Contact Details:

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**Packaging Details**

- Pack Style: Reel      Tape & reel in accordance with EIA-481D  
Pack Size: 3,000
- *Alternative packing option available*

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