

**Customer Part:**



**Description**

- 0.9V low voltage oscillator in a hermetically sealed 3.2 x 2.5mm surface mount ceramic package.
- Model IQXO-691 3225-09
- Model Issue number 2

**Frequency Parameters**

- Frequency 27.0MHz
- Frequency Stability ±50.00ppm
- Operating Temperature Range -40.00 to 85.00°C
- Ageing ±3ppm max in 1st year @ 25°C

**Electrical Parameters**

- Supply Voltage 0.9V ±5%
- Current Draw 10.000mA

**Output Details**

- Output Compatibility CMOS
- Drive Capability 15pF max
- Rise and Fall Time 5.0ns max
- Duty Cycle 45/55%
- Output Voltage Levels:  
Output Low (VoL): 10%Vs max  
Output High (VoH): 90%Vs min
- Start Up Time: 10ms max

**Output Control**

- Standby Operation:  
Logic '1' (≥70% Vs) to pad 1 enables oscillator output.  
Logic '0' (≤30% Vs) 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 (internal pull-up resistor).
- Standby Current: 100µA max

**Noise Parameters**

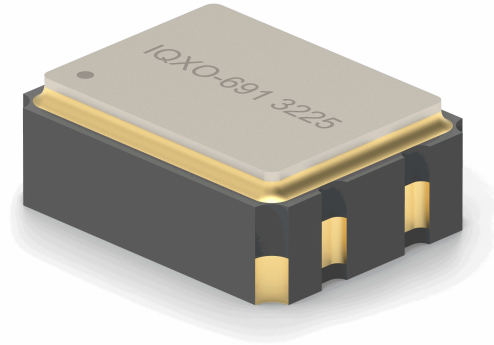
- RMS Phase Jitter (12kHz to 20MHz): 1ps max

**Environmental Parameters**

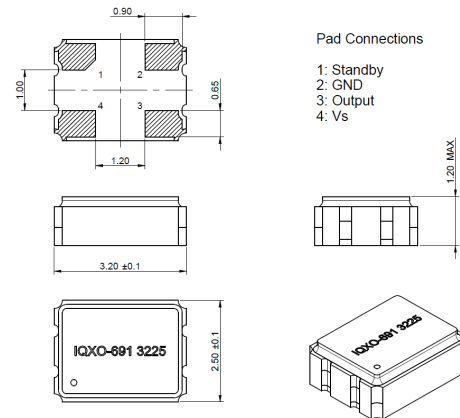
- Storage Temperature Range: -55 to 125°C
- Mechanical Shock: MIL-STD-883, Method 2002, Condition B.
- Vibration: MIL-STD-883, Method 2007, Condition A.
- Moisture Resistance: MIL-STD-883, Method 1004.
- Thermal Cycling: MIL-STD-883, Method 1010, Condition B.
- Solderability: MIL-STD-883, Method 2003.
- Resistance to Soldering Heat: MIL-STD-202, Method 210, Condition K.
- Fine Leak Test: MIL-STD-883, Method 1014, Condition A.
- Gross Leak Test: MIL-STD-883, Method 1014, Condition C.

**Manufacturing Details**

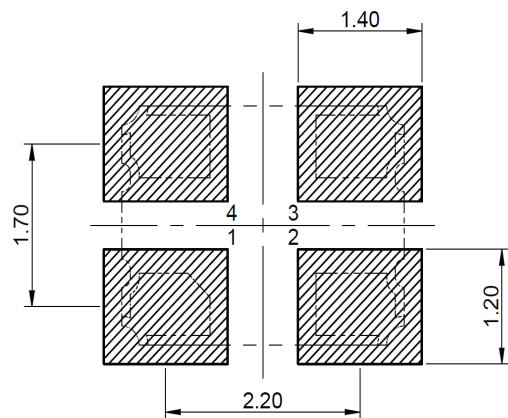
- Note: Please connect a bypass capacitor of 0.1µF between +Vs and circuit ground.
- RoHS Terminations Au
- RoHS Reflow Temp 260°C max for 10secs max



**Outline (mm)**



**Recommended Solder Pad Layout**



**Sales Office Contact Details:**

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**Customer Part:****Compliance**

- RoHS Status (2015/863/EU)      Compliant
- REACH Status                      Compliant
- MSL Rating (JDEC-STD-033):    1

**Packaging Details**

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

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