

**Customer Part:**

**Description**

- Voltage Controlled Temperature Compensated Crystal Oscillator (TVXO)
- Model IQXT-200-45
- Model Issue number 1

**Frequency Parameters**

- Frequency 10.0MHz
- Frequency Tolerance  $\pm 1.00$ ppm
- Frequency Stability  $\pm 0.10$ ppm
- Operating Temperature Range -40.00 to 105.00°C
- Ageing  $\pm 0.01$ ppm max per day,  $\pm 1$ ppm max/year
- Frequency Tolerance (measurement referenced to frequency observed with TA=25°C, Vs=3.3V, VC=1.65V within 30 days after ex-works)
- Frequency Stability: TA varied across the operating temperature range, measurement referenced to frequency observed with TA=25°C, Vs=3.3V, VC=1.65V, load=15pF and temperature variable speed less than 2°C per minute.
- Ageing: TA=25°C, Vs= 3.3V, VC=1.65V and after 1hr of operation.
- Supply Voltage Variation (measurement referenced to frequency observed with TA=25°C, Vs varied from 3.13V to 3.47V, VC=1.65V and load=15pF):  $\pm 0.05$ ppm max
- Load Variation (5% load change measurement referenced to frequency observed with TA=25°C, Vs=3.3V, VC=1.65V and load=15pF):  $\pm 0.05$ ppm max

**Electrical Parameters**

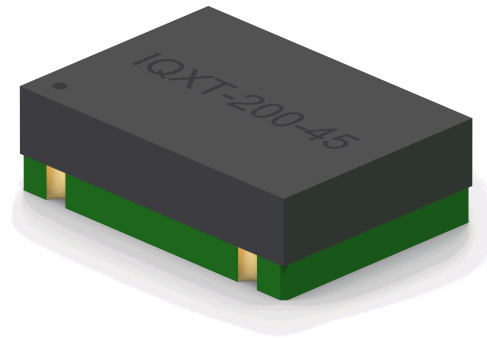
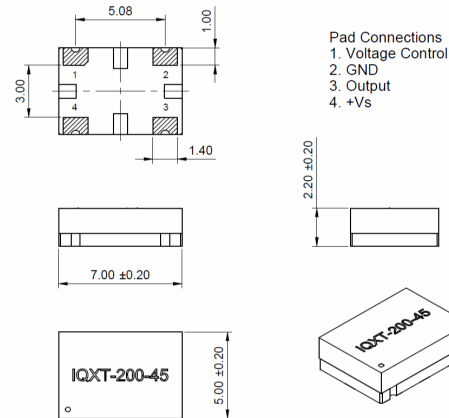
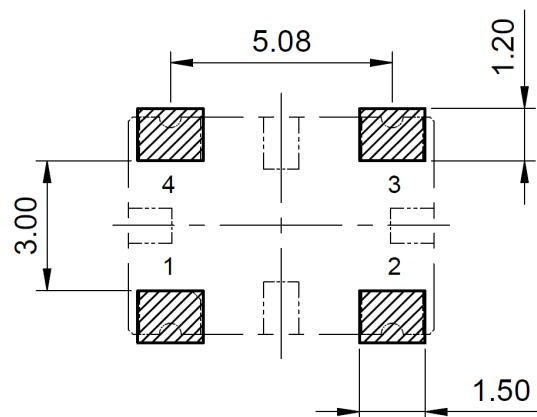
- Supply Voltage 3.3V  $\pm 5\%$
- Current Draw 10.000mA
- Current: @ TA=25°C, Vs=3.3V, VC=1.65V and load=15pF

**Frequency Adjustment**

- Pulling  $\pm 8$ ppm min
- Control Voltage 1.65V  $\pm 1.65$ V
- Input Impedance 100k $\Omega$  min
- Linearity:  $\pm 10\%$  max
- Slope: Positive

**Output Details**

- Output Compatibility HCMOS
- Drive Capability 15pF
- Rise and Fall Time 5.0ns max
- Duty Cycle 45/55%
- Output Voltage Levels (@ Vs=3.3V and load=15pF):  
Output Low (VoL): 0.4V max  
Output High (VoH): 2.4V min


**Outline (mm)**

**Recommended Solder Pad Layout**

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