# WATCH CRYSTAL

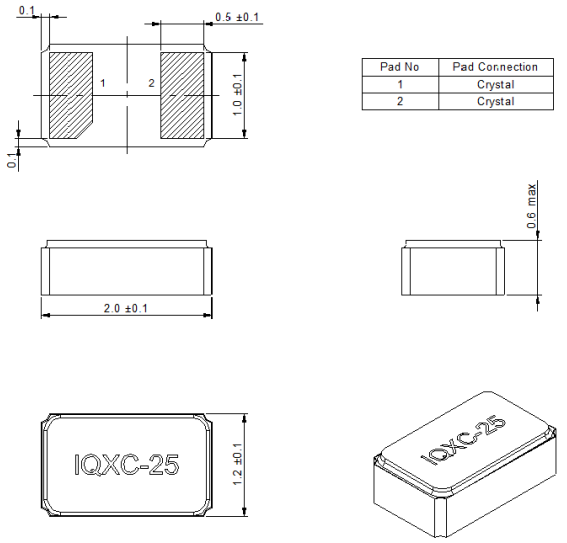
**Part Number: 830050789** | IQXC-25

AKA Number: LFXTAL050789

## General Information

2.0 x 1.2 mm SMD crystal in a hermetically sealed ceramic package with an electro-beam sealed metal lid.
Suitable for real time clock applications.

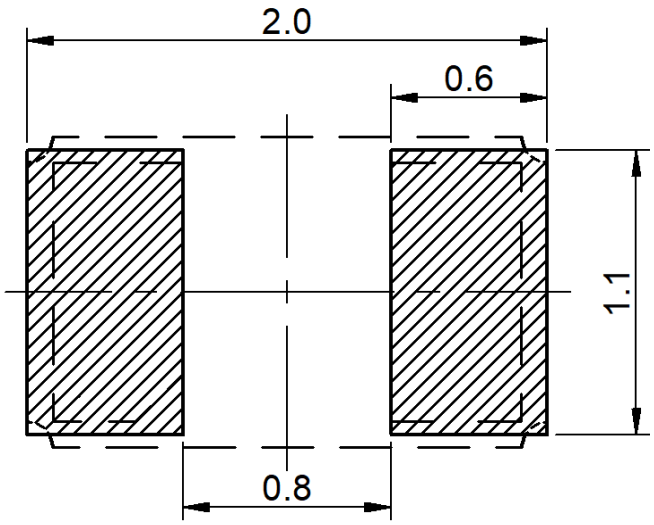
## Dimensions [mm]




| Pad No | Pad Connection |
|---|---|
| 1 | Crystal |
| 2 | Crystal |




## Recommended Land Pattern [mm]



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## Frequency Parameters

| | |
|---|---|
| Frequency | 32.7680 kHz |
| Frequency Tolerance | ± 20 ppm @25°C ±5°C |
| Operating Temperature | -40 °C to 85 °C |
| Overtone Order | Fundamental |
| Ageing | ± 3 ppm max per year @ 25 ° C |
| Frequency Stability Coefficient: -0.03 ±0.01ppm/°C² | |

## Material Parameters

| | |
|---|---|
| Termination Finish | W<br>Ni<br>Au |
| Moisture Sensitivity Level (MSL) | Not Applicable |

## Manufacturing Details

Reflow: 260 °C max for 5 seconds max.

## Electrical Parameters

| | |
|---|---|
| Load Capacitance $C_L$ | 12.5 pF |
| Shunt Capacitance $C_0$ | 1.3 pF typ.<br>1.7 pF max. |
| Drive Level | 0.1 µW recommended<br>0.5 µW max. |
| ESR | 90000 Ω max. |

Motional Capacitance (C1): 6.5 fF typ

## Environmental Parameters

| | |
|---|---|
| Storage Temperature Range: | -55 °C to 125 °C |

- Shock: IEC 60068-2-27: 1000 g, 1 ms, 3 times in each of the 3 mutually perpendicular planes.
- Vibration: IEC 60068-2-6: 1.5 mm amplitude, 10 Hz ~ 55 Hz, 1 minute in 3 mutually perpendicular planes for the total of 6 hours (2 hours in each plane).

## Technical Standards

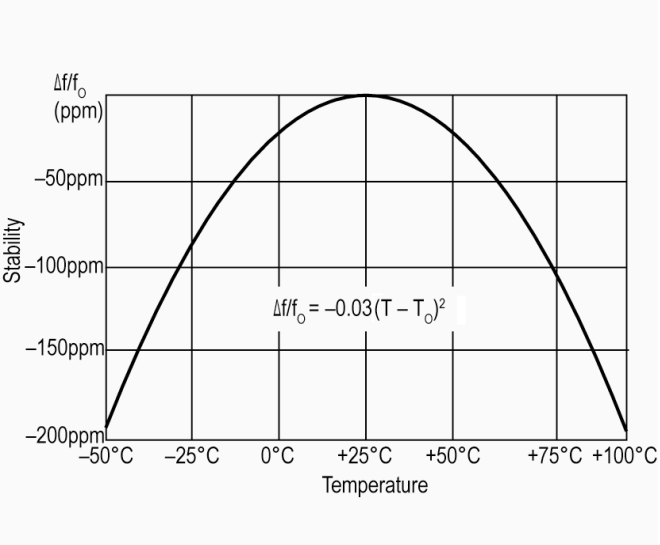
| | |
|---|---|
| RoHS Status | 2015/863/EU - Compliant |
| REACH Status | Compliant |

## Packaging Details

| | |
|---|---|
| Packaging SPQ | Tape & Reel 3000 pcs |

- Tape & reel in accordance with EIA-481
- Quantities below the standard reel size to be supplied on cut tape.

## Stability vs. Temperature




## Company Address

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