

Quartz Crystal Specification IQXC-137

ISSUE 1; July 2016

Description

- The IQXC-137 is a low profile SMD AT-cut quartz crystal in a ceramic package with a 2.5 x 2.0mm footprint.
- Applications: Feature phone GPS

Low ageing

Features: Excellent shock and vibration performance

Frequency Parameters

■ Frequency
■ Frequency Tolerance
±10.00ppm to ±50.00ppm

■ Tolerance Condition @ 25°C ±2°C

■ Frequency Stability ±10.00ppm to ±50.00ppm
■ Ageing ±1ppm max per year @ 25°C

 Reflow shift (Two consecutive reflow as per profile after 4 hours recovery at 25°C): ±1ppm max

 Frequency stability over temperature referenced to frequency reading at 25°C and the specified load capacitance.

 Frequency perturbations (Peak-to-peak deviation from the frequency versus temperature curve fit 5th order. Minimum of 1 frequency reading every 3°C over operating temperature range): 1ppm max

 Static temperature hysteresis (Frequency change after reciprocal temperature ramped over the operating range.
Frequency measured before and after at 25°C): ±0.4ppm max

Electrical Parameters

Load Capacitance (CL)
Shunt Capacitance (C0)
Drive Level
5.0pF to 50.0pF
0.5 to 3pF
50µW max

Operating Temperature Ranges

-40 to 85°C

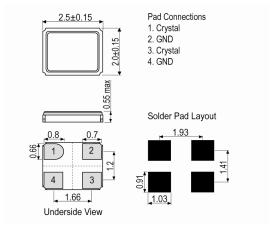
Environmental Parameters

- g Sensitivity Gamma vector of all three axes from 30Hz to 1500Hz: 2ppb/g max
- Insulation Resistance (100V ±15V at 25°C): 500MΩ min
- Shock: Half sine-wave acceleration of 100G peak amplitude for 11ms duration, 3 cycles in each plane
- Humidity: After 48 hours at 85°C 85% relative humidity non-condensing
- Thermal shock: Exposed at -40°C for 30 minutes then to 85°C for 30 minutes constantly for a period of 5 days
- Vibration: 10G RMS 30 Hz to 1500 Hz duration for 6 hours
- Storage temperature: -55 to 105°C

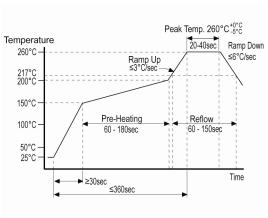
Ordering Information

minimum information required Frequency Model* Frequency Tolerance* Frequency Stability* Operating Temperature Range* Load Capacitance*

Outline (mm)



Pb-Free Reflow



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Quartz Crystal Specification *IQXC-137*

Compliance

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

Packaging Details

Pack Style: Reel Tape & Reel in accrordance with EIA-481-D

Pack Size: 3,000

Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Over Tone Order	ESR
		°C	ppm		Ω
16.368MHz	52.0MHz	-40 to 85	±10	Fundamental	60

^{*}Stability Maximum values ±50ppm

This document was correct at the time of printing; please contact your local sales office for the latest version. Click to view latest version on our website.

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