

ISSUE 1; January 2024

Description

- Ceramic package with a hermetically seam sealed metal lid suitable for automotive applications. Qualified to AEC-Q200 Rev D and with IATF-16949:2016 release. Not suitable for safety critical applications.

Frequency Parameters

- Frequency 20.0MHz to 50.0MHz
- Frequency Tolerance $\pm 10.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Tolerance Condition @ 25°C
- Frequency Stability $\pm 20.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing $\pm 5\text{ppm}$ max per year @ 25°C

Electrical Parameters

- Load Capacitance (CL) 8.0pF to 30.0pF
- Shunt Capacitance (C0) 3pF max
- Drive Level 100 μ W max
- Note: Non-standard Load Capacitances and Drive Levels are available - please contact an IQD Sales Office.

Operating Temperature Ranges

- -40 to 85°C
- -40 to 125°C

Environmental Parameters

- Storage Temperature Range: -55 to 150°C
- Qualified to AEC-Q200 Rev D

Manufacturing Details

- RoHS Terminations NiAu

Ordering Information

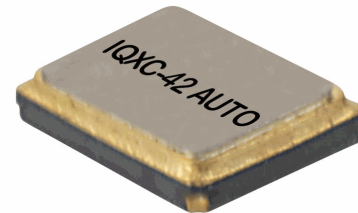
- Frequency*
Model*
Frequency Tolerance (@ 25°C)*
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Load Capacitance*
Overtone
(*minimum required)
- Example
20.0MHz IQXC-42 AUTO
50/100/-40 to 85C/16 FUND

Compliance

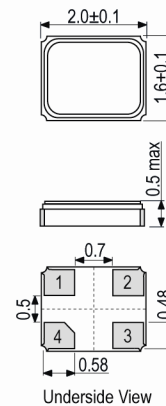
- RoHS Status (2015/863/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Cutt In tape, cut from a reel
Pack Size: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 3,000



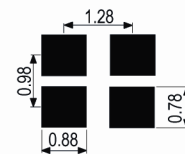
Outline (mm)



Pad Connections

1. Crystal
2. GND
3. Crystal
4. GND

Solder Pad Layout



Underside View

Sales Office Contact Details:

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Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability* (Min)	Over Tone Order	ESR
		°C	ppm		Ω
20.0MHz	23.999999MHz	-40 to 85	±20	Fundamental	120
		-40 to 125	±50		120
24.0MHz	29.999999MHz	-40 to 85	±20	Fundamental	100
		-40 to 125	±50		100
30.0MHz	37.999999MHz	-40 to 85	±20	Fundamental	80
		-40 to 125	±50		80
38.0MHz	50.0MHz	-40 to 85	±20	Fundamental	60
		-40 to 125	±50		60

*Stability Maximum values ±100ppm

This document was correct at the time of printing; please contact your local sales office for the latest version.

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