

ISSUE 2; April 2016

Description

- Ceramic package with a hermetically seam sealed metal lid suitable for automotive applications. Qualified to AEC-Q200 and available with TS16949 release.
- -B 4 pad

Frequency Parameters

- Frequency 11.0MHz to 150.0MHz
- Frequency Tolerance $\pm 10.00\text{ppm}$ to $\pm 50.00\text{ppm}$
- Tolerance Condition @25°C $\pm 2^\circ\text{C}$
- Frequency Stability $\pm 15.00\text{ppm}$ to $\pm 150.00\text{ppm}$
- Ageing $\pm 5\text{ppm}$ max per year @ 25°C

Electrical Parameters

- Load Capacitance (CL) 8.0pF to 75.0pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 50 μW standard, 200 μW max

Operating Temperature Ranges

- -40 to 85°C
- -40 to 125°C

Environmental Parameters

- Storage Temperature Range: -45°C to +130°C
- Qualified to AEC-Q200

Manufacturing Details

- Maximum Process Temperature: 260°C (10secs max)

Ordering Information

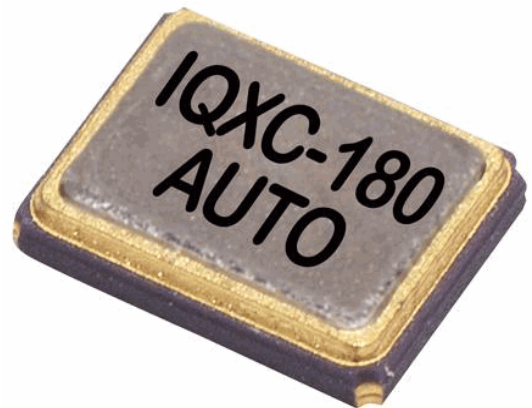
- Frequency*
Model*
Frequency Tolerance (@ 25°C)*
Frequency Stability (over operating temperature range)*
Operating Temperature Range*
Load Capacitance*
Overtone
(*minimum required)
- Example
20.0MHz IQXC-180 AUTO-B
50/100/-40 to 125C/8 FUND

Compliance

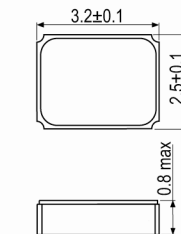
- RoHS Status (2011/65/EU) Compliant
- REACH Status Compliant
- MSL Rating (JDEC-STD-033): Not Applicable

Packaging Details

- Pack Style: Bulk Loose in bulk pack
Pack Size: 100
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 3,000
- Pack Style: Cutt Cut tape
Pack Size: 100



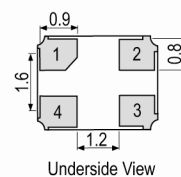
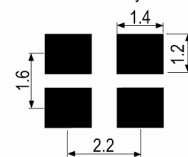
Outline (mm) -B = 4 pad



Pad Connections

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

Solder Pad Layout



Underside View

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Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Over Tone Order	ESR
		°C	ppm		Ω
11.0MHz	11.999999MHz	-40 to 85 -40 to 125	±15 ±100	Fundamental	300
12.0MHz	12.999999MHz	-40 to 85 -40 to 125	±15 ±100	Fundamental	200
13.0MHz	15.999999MHz	-40 to 85 -40 to 125	±15 ±100	Fundamental	150
16.0MHz	19.999999MHz	-40 to 85 -40 to 125	±15 ±100	Fundamental	80
20.0MHz	21.999999MHz	-40 to 85 -40 to 125	±15 ±100	Fundamental	60
22.0MHz	54.0MHz	-40 to 85 -40 to 125	±15 ±100	Fundamental	50
60.0MHz	150.0MHz	-40 to 85 -40 to 125	±15 ±100	3rd Overtone	300

**Stability Maximum values ±150ppm*

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