

ISSUE 1; September 2023

Description

- Standard 2 x 1.6mm SMD crystal.
Ceramic package with a seam sealed metal lid, hermetically sealed.

Frequency Parameters

- Frequency 16.0MHz to 50.0MHz
- Frequency Tolerance $\pm 10.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Frequency Stability $\pm 10.00\text{ppm}$ to $\pm 100.00\text{ppm}$
- Ageing $\pm 3\text{ppm}$ max per year @25°C
- Note 2: For other frequency/specification combinations, please contact our sales office.

Electrical Parameters

- Load Capacitance (CL) 8.0pF to 30.0pF
- Shunt Capacitance (C0) 3pF max
- Drive Level 100µW max
- Note 1: ESR values for reference only. The final spec shall be confirmed for each frequency after sample production.

Operating Temperature Ranges

- 0 to 50°C
- 10 to 60°C
- 10 to 70°C
- 20 to 70°C
- 40 to 85°C
- 40 to 105°C
- 40 to 125°C

Environmental Parameters

- Shock: IEC 60068-2-27: 1000G, 1ms, 3 times in each of 3 mutually perpendicular planes.
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs).
- Storage Temperature Range: -55 to 125°C

Manufacturing Details

- RoHS Terminations NiAu
- RoHS Reflow 260degC 10s

Ordering Information

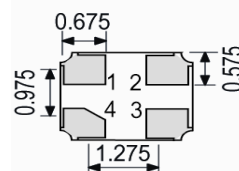
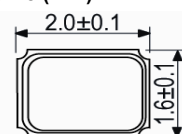
- Frequency*
- Model*
- Frequency Tolerance (@25°C)*
- Frequency Stability (over operating temperature range)*
- Operating Temperature Range*
- Load Capacitance*
- Overtone
- Example:
30.0MHz IQXC-42
30/50/-40 to 85C/16 FUND

Compliance

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



Outline (mm)

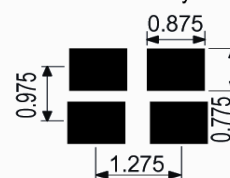


Underside View

Pad Connections

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

Solder Pad Layout



Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1.760 668 8935

Email: info@iqdfrequencyproducts.com

Web: www.iqdfrequencyproducts.com

Packaging Details

- Pack Style: RL3K Tape & reel in accordance with EIA-481-D
Pack Size: 3,000
- Pack Style: Reel Tape & reel in accordance with EIA-481-D
Pack Size: 1,000
- Pack Style: Cutt In tape, cut from a reel
Pack Size: 100

Electrical Specification - maximum limiting values

Frequency Min	Frequency Max	Temperature Range	Stability (Min)	Over Tone Order	ESR
		°C	ppm		Ω
16.0MHz	19.999999MHz	0 to 50	±10	Fundamental	200
		-10 to 60	±15		200
		-20 to 70	±15		200
		-40 to 85	±20		200
		-40 to 105	±50		200
		-40 to 125	±100		200
20.0MHz	23.999999MHz	0 to 50	±10	Fundamental	120
		-10 to 70	±15		120
		-20 to 70	±15		120
		-40 to 85	±20		120
		-40 to 105	±50		120
		-40 to 125	±100		120
24.0MHz	29.999999MHz	0 to 50	±10	Fundamental	100
		-10 to 70	±15		100
		-20 to 70	±15		100
		-40 to 85	±20		100
		-40 to 105	±50		100
		-40 to 125	±100		100
30.0MHz	37.999999MHz	0 to 50	±10	Fundamental	80
		-10 to 60	±15		80
		-20 to 70	±15		80
		-40 to 85	±20		80
		-40 to 105	±50		80
		-40 to 125	±100		80
38.0MHz	50.0MHz	0 to 50	±10	Fundamental	60
		-10 to 60	±15		60
		-20 to 70	±15		60
		-40 to 85	±20		60
		-40 to 105	±50		60
		-40 to 125	±100		60

*Stability Maximum values ±100ppm

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