

ISSUE 4; August 2022

### Description

- Standard 1.6 x 1.2mm SMD crystal in a hermetically sealed ceramic package with a sealed metal lid

### Frequency Parameters

- Frequency: 24.0MHz to 80.0MHz
- Frequency Tolerance:  $\pm 10.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Tolerance Condition: @ 25°C
- Frequency Stability:  $\pm 10.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing:  $\pm 5\text{ppm}$  max per year @ 25°C
- Developed frequencies: 24.0MHz, 26.0MHz, 27.0MHz, 27.120MHz, 32.0MHz, 36.0MHz, 37.40MHz, 38.40MHz, 40.0MHz, 48.0MHz

Crystals have been developed at the above frequencies and with the following specification -

Tolerance:  $\pm 10\text{ppm}$

Stability:

$\pm 15\text{ppm}$  over -20 to 70°C

$\pm 30\text{ppm}$  over -40 to 85°C

For alternative frequencies and specifications please contact an IQD Sales Office

### Electrical Parameters

- Load Capacitance (CL): 10.0pF to 30.0pF
- Shunt Capacitance (C0): 7pF max
- Drive Level: 100µW max
- Note: ESR values for reference only - the final specification shall be confirmed for each frequency after sample production

### Operating Temperature Ranges

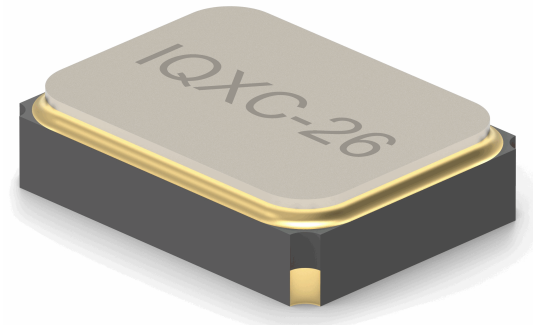
- 0 to 50°C
- 10 to 60°C
- 20 to 70°C
- 40 to 85°C

### Environmental Parameters

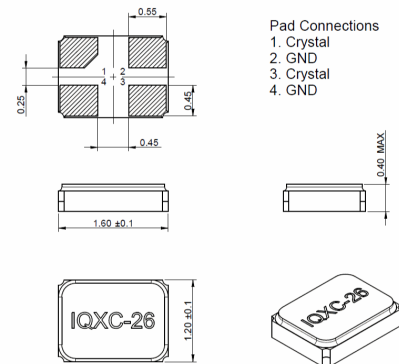
- Storage Temperature Range: -40 to 85°C
- Shock: IEC 60068-2-27: 1000G, 1ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: IEC 60068-2-6: 1.5mm amplitude, 10Hz-55Hz, 1min in 3 mutually perpendicular planes, duration 2hrs each plane (total 6hrs)

### Ordering Information

- Frequency\*
- Model\*
- Frequency Tolerance (@ 25°C)\*
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Load Capacitance\*
- Overtone
- (\*minimum required)
- Example
- 32.0MHz IQXC-26
- 30/30/-40 to 85C/16 FUND

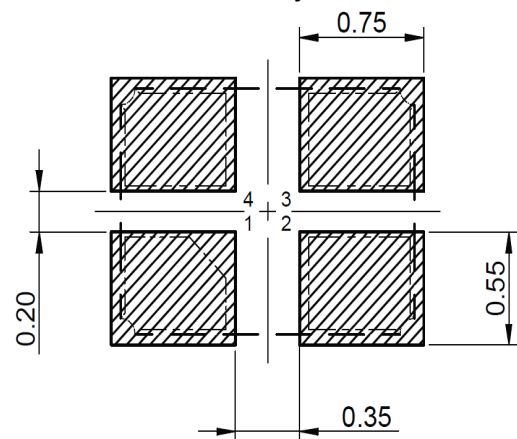


### Outline (mm)



NOTE: The pad style on the base of the device may differ slightly from the drawing. The chamfer may appear on pad 1 or 4. This causes no change to the electrical performance of the device.

### Recommended Solder Pad Layout



### Sales Office Contact Details:

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**Compliance**

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

**Packaging Details**

- Pack Style: Reel      Tape & reel in accordance with EIA-481-D  
                                  Pack Size: 3,000
- 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
24.0MHz	30.0MHz	0 to 50	±10	Fundamental	200
		-10 to 60	±10		200
		-20 to 70	±20		200
		-40 to 85	±30		200
30.000001MHz	80.0MHz	0 to 50	±10	Fundamental	100
		-10 to 60	±10		100
		-20 to 70	±20		100
		-40 to 85	±30		100

\*Stability Maximum values ±100ppm

*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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