

ISSUE 9; September 2021

### Description

- Similar, low cost drop on alternative to the 86SMX. Metal can package mounted on an SMD base. Resistance welded, hermetically sealed in an inert atmosphere, glass to metal seals on leads.

### Frequency Parameters

- Frequency: 3.01MHz to 100.0MHz
- Frequency Tolerance:  $\pm 30.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Tolerance Condition: @ 25°C  $\pm 2^\circ\text{C}$
- Frequency Stability:  $\pm 50.00\text{ppm}$  to  $\pm 500.00\text{ppm}$
- Ageing:  $\pm 5\text{ppm}$  typ per year @ 25°C

### Electrical Parameters

- Load Capacitance (CL): 10.0pF to 32.0pF
- Shunt Capacitance (C0): 7pF max
- Drive Level: 50 $\mu\text{W}$  typ, 300 $\mu\text{W}$  max

### Operating Temperature Ranges

- 10 to 60°C

### Environmental Parameters

- Storage Temperature Range: -55 to 125°C
- Shock: 981m/s<sup>2</sup>, 6ms, 3 times in each of 3 mutually perpendicular planes
- Vibration: 10Hz-60Hz, 0.75mm amplitude, 60Hz-500Hz, 98.1m/s<sup>2</sup>, 30mins in 3 mutually perpendicular planes

### Manufacturing Details

- Please note that this part is NOT suitable for inverted reflow process. Please contact our application support team if this is necessary.
- RoHS Terminations: SnAgCu
- RoHS Reflow: 260degC 10s

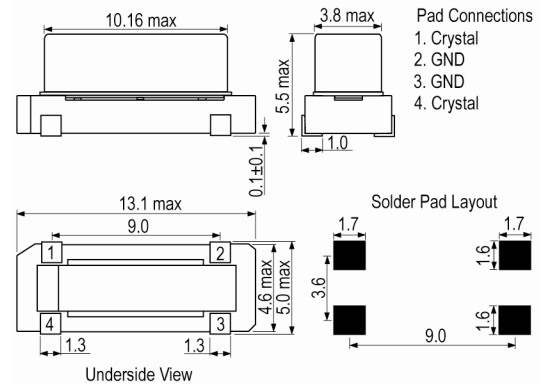
### Ordering Information

- Frequency\*
- Model\*
- Frequency Tolerance (@ 25°C)\*
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Load Capacitance\*
- Overtone\*
- (\*minimum required)
- Example  
10.0MHz 87SMX 50/50/-10 to 60C/12 FUND

### Compliance

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

### Outline (mm)



### Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)

#### Packaging Details

- 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
3.01MHz	3.499999MHz	-10 to 60	±50	Fundamental	300
3.5MHz	3.999999MHz	-10 to 60	±50	Fundamental	150
4.0MHz	4.499999MHz	-10 to 60	±50	Fundamental	130
4.5MHz	4.999999MHz	-10 to 60	±50	Fundamental	110
5.0MHz	5.999999MHz	-10 to 60	±50	Fundamental	80
6.0MHz	6.999999MHz	-10 to 60	±50	Fundamental	60
7.0MHz	9.999999MHz	-10 to 60	±50	Fundamental	50
10.0MHz	12.999999MHz	-10 to 60	±50	Fundamental	40
13.0MHz	50.0MHz	-10 to 60	±50	Fundamental	30
26.0MHz	100.0MHz	-10 to 60	±50	3OT	100

\*Stability Maximum values ±500ppm

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.](#)

#### Sales Office Contact Details:

UK: +44 (0)1460 270200

USA: +1.760.318.2824

Email: [info@iqdfrequencyproducts.com](mailto:info@iqdfrequencyproducts.com)

Web: [www.iqdfrequencyproducts.com](http://www.iqdfrequencyproducts.com)