

ISSUE 12; April 2022

### Description

- 7 x 5mm SMD crystal Ceramic package with a seam sealed metal lid, hermetically sealed.
- Offers lower profile than the standard 12SMX.
- Offers tighter stability than the standard 12SMX.
- Please see our 12SMX part for standard stock items in this package type.

### Frequency Parameters

- Frequency 8.0MHz to 100.0MHz
- Frequency Tolerance  $\pm 10.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Frequency Stability  $\pm 5.00\text{ppm}$  to  $\pm 100.00\text{ppm}$
- Ageing  $\pm 5\text{ppm}$  max per year @ 25°C

### Electrical Parameters

- Load Capacitance (CL) 10.0pF to 75.0pF
- Shunt Capacitance (C0) 7pF max
- Drive Level 100µW max

### Operating Temperature Ranges

- 0 to 50°C
- 10 to 60°C
- 20 to 70°C
- 30 to 80°C
- 40 to 85°C

### Environmental Parameters

- Storage Temperature Range: -40 to 85°C

### Manufacturing Details

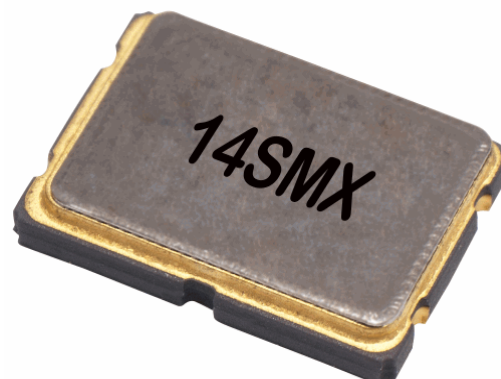
- RoHS Terminations NiAu
- RoHS Reflow 260degC 10s

### Ordering Information

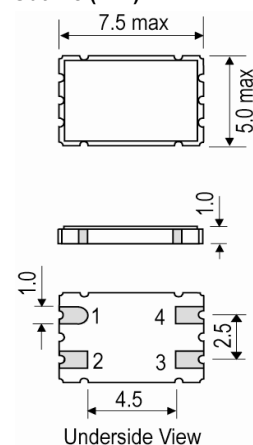
- Frequency\*
- Model\*
- Frequency Tolerance (@25°C)\*
- Frequency Stability (over operating temperature range)\*
- Operating Temperature Range\*
- Load Capacitance\*
- Overtone\*
- Example
- 10.0MHz 14SMX
- 50/50/-20 to 70C/10 FUND

### Compliance

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



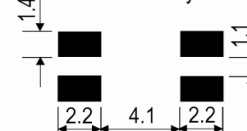
### Outline (mm)



### Pad Connections

- 1.Crystal
- 2.GND & Lid
- 3.Crystal
- 4.GND & Lid

### Solder Pad Layout



### Sales Office Contact Details:

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### 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: 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	Over Tone Order	ESR
		°C	ppm		Ω
8.0MHz	9.999999MHz	0 to 50	±5	Fundamental	60
		-10 to 60	±5		60
		-20 to 70	±5		60
		-30 to 80	±15		60
		-40 to 85	±20		60
10.0MHz	15.999999MHz	0 to 50	±5	Fundamental	50
		-10 to 60	±5		50
		-20 to 70	±5		50
		-30 to 80	±15		50
		-40 to 85	±20		50
16.0MHz	32.0MHz	0 to 50	±5	Fundamental	40
		-10 to 60	±5		40
		-20 to 70	±5		40
		-30 to 80	±15		40
		-40 to 85	±20		40
28.0MHz	83.999999MHz	0 to 50	±5	3rd Overtone	60
		-10 to 60	±5		60
		-20 to 70	±5		60
		-30 to 80	±15		60
		-40 to 85	±20		60
84.0MHz	100.0MHz	0 to 50	±5	5th Overtone	80
		-10 to 60	±5		80
		-20 to 70	±5		80
		-30 to 80	±15		80
		-40 to 85	±20		80

\*Stability Maximum values ±100ppm

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