

14SMX CRYSTALS

ISSUE 12; 1 NOVEMBER 2010 – RoHS 2002/95/EC

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

General Specifications

- Load Capacitance (CL): 10pF to 75pF or Series
- Drive Level: 100µW max
- Shunt Capacitance (C₀): 7pF max

Standard Frequency Tolerances and Stability

- ±15ppm, ±20ppm, ±30ppm, ±50ppm, ±100ppm

Operating Temperature Ranges

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

Storage Temperature Range

- 40 to 85°C

Packaging

- Loose in bulk pack, 100pcs per bag
- Tape and reel in accordance with EIA-481-D, 1kpcs per reel (please see pages 372 & 373)

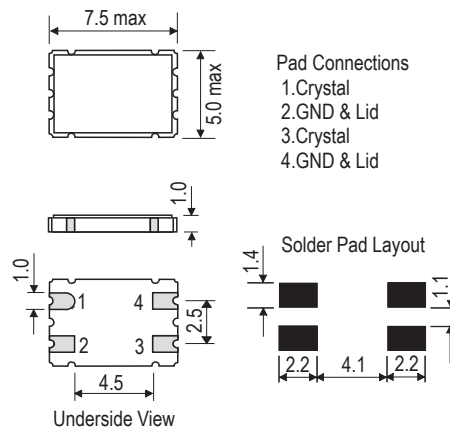
Ordering Information (*minimum required)

- 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

Outline (mm)



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

Solder Pad Layout



Electrical Specifications – maximum limiting values

Frequency Range	Frequency Tolerance @25°C ±2°C	Operating Temperature Range	Frequency Stability Available Over Operating Temperature Range		ESR Max	Vibration Mode
			Minimum	Maximum		
8.0 to <10.0MHz	±10ppm to ±100ppm	0 to 50°C	±5ppm	±100ppm	60Ω	Fundamental AT cut
		-10 to 60°C				
		-20 to 70°C				
		-30 to 80°C	±15ppm			
		-40 to 85°C	±20ppm			
10.0 to <16.0MHz		0 to 50°C	±5ppm		50Ω	
		-10 to 60°C				
		-20 to 70°C				
		-30 to 80°C	±15ppm			
		-40 to 85°C	±20ppm			
16.0 to <32.0MHz		0 to 50°C	±5ppm		40Ω	
		-10 to 60°C				
		-20 to 70°C				
		-30 to 80°C	±15ppm			
		-40 to 85°C	±20ppm			
28.0 to <84.0MHz		0 to 50°C	±5ppm		60Ω	3rd Overtone AT cut
		-10 to 60°C				
		-20 to 70°C				
		-30 to 80°C	±15ppm			
		-40 to 85°C	±20ppm			
84.0 to 100.0MHz		0 to 50°C	±5ppm		80Ω	5th Overtone AT cut
		-10 to 60°C				
		-20 to 70°C				
		-30 to 80°C	±15ppm			
		-40 to 85°C	±20ppm			

Note: High frequency fundamentals are available up to 200.0MHz, please contact sales offices

