

CSX1 Model

5X7 mm Low Profile SMD Crystal

Frequency Range: 8MHz to 49.152MHz (fund)

Calibration Tolerance: $\pm 10\text{ppm}$ to $\pm 50\text{ppm}$

Frequency Stability: $\pm 10\text{ppm}$ to $\pm 100\text{ppm}$

Temperature Ranges: 0°C to 70°C

-20°C to 70°C

-40°C to 85°C

-40°C to 85°C

Storage:

Shunt Capacitance: 5.0pF Max

Drive Level: 50 uW Typical, 300uW Max

Aging: $\pm 3\text{ppm}$ Max 1st/yr

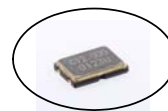
ESR: see table 1

Packaging: 1K Tape and Reel

**** Custom Designs Available**

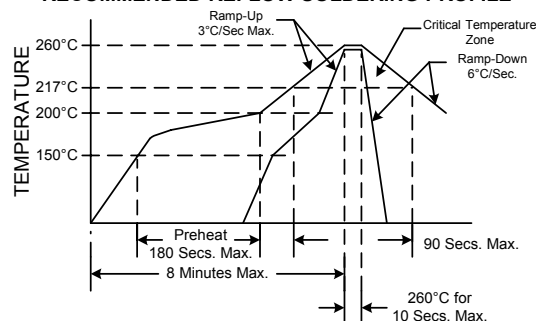
Lead Free
RoHS
Compliant

Quartz Crystal

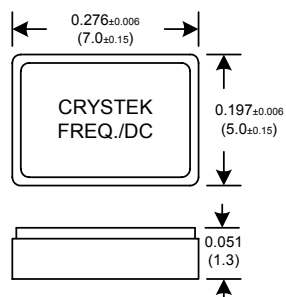


Designed to meet the precision and space requirements needed for wireless applications.

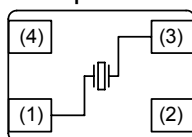
RECOMMENDED REFLOW SOLDERING PROFILE



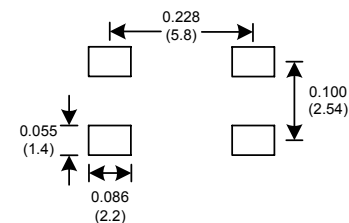
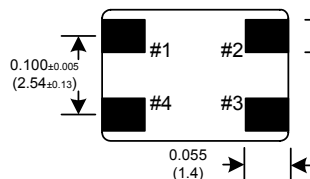
NOTE: Reflow Profile with 240°C peak also acceptable.



Top View



Bottom View



Dimensions inches (mm)

All dimensions are Max unless otherwise specified.

Build Your Own P/N

CSX1-XX-XX-Freq

Frequency Tolerance at 25°C

A $\pm 10\text{ ppm}$
B $\pm 25\text{ ppm}$
C $\pm 50\text{ ppm}$

Example:

CSX1-AB-18-45.000 = $\pm 10\text{ppm}$ at 25°C , $\pm 25\text{ppm}$ -20 to 70°C , 18pF Load Cap, 45.000MHz

Frequency Stability over Temp Range

M	$\pm 10\text{ ppm}$	(0 to 70°C)
N	$\pm 15\text{ ppm}$	(0 to 70°C)
O	$\pm 20\text{ ppm}$	(0 to 70°C)
P	$\pm 25\text{ ppm}$	(0 to 70°C)
R	$\pm 50\text{ ppm}$	(0 to 70°C)
S	$\pm 100\text{ ppm}$	(0 to 70°C)
A	$\pm 10\text{ ppm}$	(-20 to 70°C)
E	$\pm 20\text{ ppm}$	(-20 to 70°C)
B	$\pm 25\text{ ppm}$	(-20 to 70°C)
C	$\pm 50\text{ ppm}$	(-20 to 70°C)
D	$\pm 100\text{ ppm}$	(-20 to 70°C)
H	$\pm 20\text{ ppm}$	(-40 to 85°C)
J	$\pm 25\text{ ppm}$	(-40 to 85°C)
K	$\pm 50\text{ ppm}$	(-40 to 85°C)
L	$\pm 100\text{ ppm}$	(-40 to 85°C)

Resistance at series resonance

Freq. (MHz)	Max ESR
8.0 - 20.0 (F)	50
20.1 - 49.0 (F)	40

Table 1

PIN	Signal
1	Crystal
2	GND
3	Crystal
4	GND

Load Capacitance

S= Series
14= 14 pF
16= 16 pF
18= 18 pF
20= 20 pF
22= 22 pF
25= 25 pF
32= 32 pF

Specifications subject to change without notice.

TD-021009 Rev. E

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