



Quality Products and Superior Service Since 1958

Quartz Crystals

- Thru-hole Crystals from 32.768KHz to 125Mhz
- Surface Mount Crystals from 1.5Mhz to 125Mhz
- Metal, ceramic and plastic Models
- Tight tolerance / stabilities available

Crystek manufactures a broad line of frequency control devices. Crystek also offers custom Quartz Crystals design and competitor replacement solutions. Please [contact](#) one of our factory representatives or our head quarters directly for oscillator solutions not found on our website. Crystek maintains a complete design and production facility in Fort Myers, Florida to assist in providing frequency solutions.



Certificate # 12520
10/20/2000

	<p>C15-SMD 32.768KHz Ultra-Miniature Tuning Fork Watch Crystal Profile 1.5mm Frequency 32.768KHz Output: Crystal</p>
	<p>C153-SMD 32.768KHz SMD Tuning Fork Watch Crystal Package 3.2x1.5mm Frequency 32.768KHz Output: Crystal</p>
	<p>C195-SMD 32.768KHz SMD Tuning Fork Watch Crystal Package 4.9x1.8mm Frequency 32.768KHz Output: Crystal</p>
	<p>C26 & C38 32.768KHz Turning Fork Watch Crystal Package 2x6mm & 3x8mm Frequency 32.768KHz Output: Crystal</p>



C26-LF & C38-LF 32.768KHz Tuning Fork Watch Crystal
Package 2x6mm & 3x8mm
Frequency 32.768KHz
Output: **Crystal**



C26-SMD 32.768KHz SMD Tuning Fork Watch Crystal
Profile 2.5mm
Frequency 32.768KHz
Output: **Crystal**



CMD4A Surface Mount Quartz Crystal
Plastic Model Replacement Solution
Profile 4mm, 4.5mm, and 5.5mm
Frequency Range 3.57945MHz to 86MHz
Stability 10-100ppm 0/70C & 20-100ppm -40/85C
Output: **Crystal**



CRMxx Miniature Size Quartz Crystal
Frequency Range 10MHz to 135MHz
Stability 10-100ppm 0/70C & 20-100ppm -40/85C
Output: **Crystal**



CSX1 Ceramic 5x7mm Surface Mount Quartz Crystal
Profile 1.3mm
Frequency Range 8MHz to 49.152MHz
Stability 10-100ppm -20/70 & 20-100ppm -40/85C
Output: **Crystal**



CSX2 Ceramic 3.5x6mm Surface Mount Quartz Crystal
Profile 1.0mm
Frequency Range 12.8MHz to 45MHz
Stability 10-100ppm -20/70C
Output: **Crystal**



CSX3 Ceramic 3.2x5mm Surface Mount Quartz Crystal
Profile 1.0mm
Frequency Range 12.8MHz to 45MHz
Stability 10-100ppm -20/70C
Output: **Crystal**

CSX1 Model

5X7 mm Low Profile SMD Crystal

Frequency Range: 8MHz to 49.152MHz (fund)

Calibration Tolerance: ±10ppm to ±50ppm

Frequency Stability: ±10ppm to ±100ppm

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: ± 3ppm Max 1st/yr

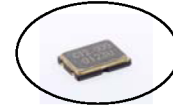
ESR: see table 1

Packaging: 1K Tape and Reel



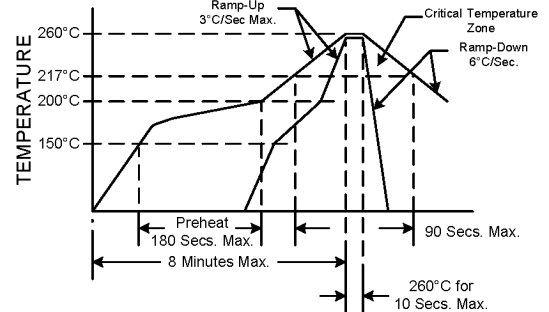
**** Custom Designs Available**

Quartz Crystal

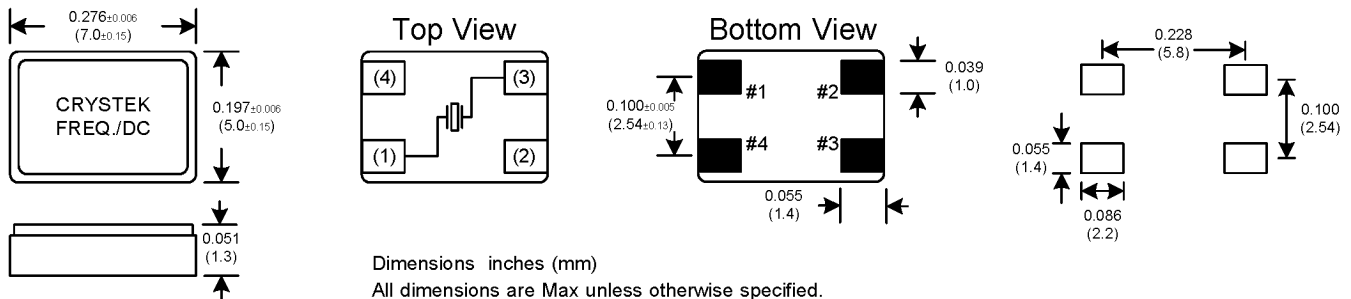


Designed to meet the precision and space requirements needed for wireless applications.

RECOMMENDED REFLOW SOLDERING PROFILE



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



Build Your Own P/N

CSX1-XX-XX-Freq

Frequency Tolerance at 25°C	
A	±10 ppm
B	±25 ppm
C	±50 ppm

Example:

CSX1-AB-18-45.000 = ±10ppm at 25°C, ±25ppm -20 to 70°C, 18pF Load Cap, 45.000MHz

Frequency Stability over Temp Range		
M	±10 ppm	(0 to 70°C)
N	±15 ppm	(0 to 70°C)
O	±20 ppm	(0 to 70°C)
P	±25 ppm	(0 to 70°C)
R	±50 ppm	(0 to 70°C)
S	±100 ppm	(0 to 70°C)
A	±10 ppm	(-20 to 70°C)
E	±20 ppm	(-20 to 70°C)
B	±25 ppm	(-20 to 70°C)
C	±50 ppm	(-20 to 70°C)
D	±100 ppm	(-20 to 70°C)
H	±20 ppm	(-40 to 85°C)
J	±25 ppm	(-40 to 85°C)
K	±50 ppm	(-40 to 85°C)
L	±100 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

