

Low Profile Surface Mount Crystals

Cardinal "AT-Strip" surface mount crystals are among the most readily available on the market today. Many popular frequencies are kept in stock at our facility.

Series **CSM1**



Part Numbering Example: CSM1 Z - A1 B2 C2 200 - 3.579545 D18 - 3

CSM1	Z	A1*	B2	C2	200	3.579545	D18	- 3
SERIES	ADDED FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	RESISTANCE	FREQUENCY	LOAD CAP.	OVERTONE
CSM1	BLANK = BULK PACK Z = TAPE AND REEL	A0 = -10°C ~ +60°C A1 = -10°C ~ +70°C A2 = -40°C ~ +85°C A3 = -55°C ~ +125°C	B1 = ±100 B2 = ± 50 B3 = ± 30 B4 = ± 10	C1 = ±100 C2 = ± 50 C3 = ± 30 C4 = ± 10	SEE CHART BELOW		D16,18,20,ETC. DS = SERIES	BLANK: FUND. -3: 3rd OT -5: 5th OT -7: 7th OT -BT: BT Cut

***NOTE:** The above ABC combinations cover basic specification options. We tailor our crystal specifications to meet customer requirements. Please contact our sales department if you don't see exactly what you need.

Specifications:

Frequency Range:

3.579545 ~ 38.000 MHz	AT Cut Fundamental
25.000000 ~ 75.000 MHz	AT Cut 3rd Overtone
26.000000 ~ 48.000 MHz	BT Cut Fundamental

Operating Temperature: -10°C ~ +70°C *Standard*
-40°C ~ +85°C

Frequency Stability: ±100 ppm
± 50 ppm *Standard*
± 30 ppm
± 15 ppm

Frequency Tolerance: ±100 ppm
(at 25°C) ± 50 ppm *Standard*
± 30 ppm
± 10 ppm

Load Capacitance: Standard 18 pF or series.
Please specify your required load.

Resistance: Maximum resistance corresponds to frequency.
See chart below.

Standard: Mode: Fundamental or 3rd Overtone
Shunt Capacitance: 7 pF Max
Aging: ± 5 ppm/year
Drive Level: 1.0 mW Max

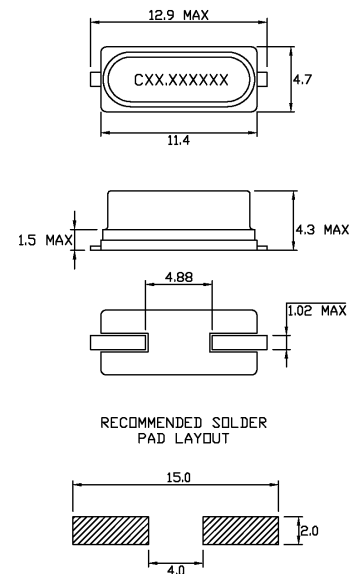
Optional Features: Tape and Reel (1K per Reel)

Note: Not all combinations of the above tolerances, stabilities, and temperature ranges are available. Consult the factory if your requirement is not standard.

Resistance Chart: All resistances are maximum values.

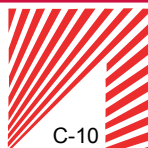
EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE), AND CUT					
Frequency MHz	ESR(Ω)	Mode/cut	Frequency MHz	ESR (Ω)	Mode/cut
3.579545~4.999	200 Max	Fund./AT	15.000~15.999	60 Max	Fund./AT
5.000~5.999	150 Max	Fund./AT	16.000~23.999	50 Max	Fund./AT
6.000~7.999	120 Max	Fund./AT	24.000~30.000	40 Max	Fund./AT
8.000~8.999	90 Max	Fund./AT	24.000~48.000	40 Max	Fund./BT
9.000~9.999	80 Max	Fund./AT	24.576~29.999	150 Max	3rd Overtone/AT
10.000~14.999	70 Max	Fund./AT	30.000~75.000	100 Max	3rd Overtone/AT

CSM1



Cardinal Components, Inc.

155 Route 46 West
Wayne, NJ 07470
Rev: C-090414-11



C-10

TEL: (973)785-1333
E-MAIL: sales@cardinalxtal.com
WEB: <http://www.cardinalxtal.com>