CARDINAL COMPONENTS

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

Pb RoHS COMPLIANT 2002 / 95 / EC

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	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

***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:

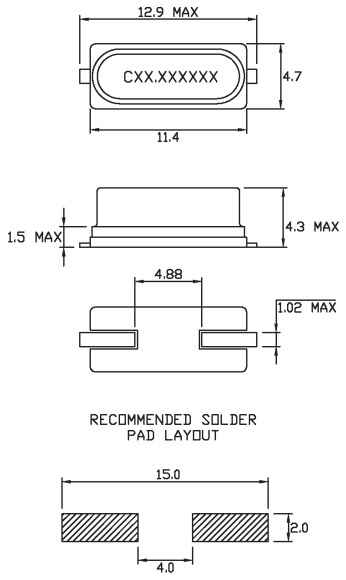
Frequency Range:

3.579545~36.000 MHz	AT Cut Fundamental
36.000000~80.000 MHz	AT Cut 3rd Overtone

Operating Temperature:	-10°C ~ +70°C -40°C ~ +85°C	*Standard*
Frequency Stability:	±100 ppm ± 50 ppm ± 30 ppm ± 15 ppm	*Standard*
Frequency Tolerance: *(at 25°C)*	±100 ppm ± 50 ppm ± 30 ppm ± 10 ppm	*Standard*
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.

CSM1



Resistance Chart: *All resistances are maximum values.*

Frequency Range	MODE	E.S.R
Fo ≦ 3.58 MHz	A1	<140 Ω
4 MHz < Fo < 5 MHz	A1	<120 Ω
5 MHz ≦ Fo < 7 MHz	A1	<80 Ω
7 MHz ≦ Fo < 9 MHz	A1	<45 Ω
9 MHz ≦ Fo < 13 MHz	A1	<40 Ω
13 MHz ≦ Fo < 16 MHz	A1	<35 Ω
16 MHz ≦ Fo < 20 MHz	A1	<30 Ω
20 MHz ≦ Fo < 30 MHz	A1	<25 Ω
30 MHz ≦ Fo < 36 MHz	A1	<25 Ω
30 MHz ≦ Fo < 36 MHz	A3	<80 Ω
36 MHz ≦ Fo ≦ 80 MHz	A3	<80 Ω

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