

Low Profile Crystals

Cardinal "AT-Strip" low profile crystals come in a variety of heights and specifications to accommodate all of our customers' requirements.

Series **CLP**



Part Numbering Example: **CLP X - A1 B2 C2 200 - 3.579545 D18 - 3**

CLP	X	A1*	B2	C2	200	3.579545	D18	-3
SERIES	ADDED FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	RESISTANCE	FREQUENCY	LOAD CAP.	OVERTONE
CLP	F = FORMED LEADS W = VINYL SLEEVING X = INSULATOR PAD Y = THIRD LEAD Z = TAPE AND REEL BLANK = BULK PACK	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	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:	Formed Leads
	Vinyl Sleeves
	Insulator Pads
	Radial Tape and Reel

Note 1: Not all combinations of the above tolerances, stabilities, and temperature ranges are available. Consult the factory if your requirement is not standard.

Note 2: Heights of 3.5 mm (0.138) and 2.5 mm (0.098) are also available. Please consult factory if required.

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

CLP

