

# Low Profile Crystals

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



**CLP Series**  
**CLP3**  
**CLP4**  
**CLP5**  
**CLP6**

**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	A0 = -10°C ~ +60°C	B1 = ±100	C1 = ±100	SEE CHART		D16, 18, 20, ETC.	BLANK: FUND.
CLP3	W = VINYL SLEEVING	A1 = -10°C ~ +70°C	B2 = ± 50	C2 = ± 50	BELOW		DS = SERIES	-3: 3rd OT
CLP4	X = INSULATOR PAD	A2 = -40°C ~ +85°C	B3 = ± 30	C3 = ± 30				-5: 5th OT
CLP5	Y = THIRD LEAD	A3 = -55°C ~ +125°C	B4 = ± 10	C4 = ± 10				-7: 7th OT
CLP6	Z = TAPE AND REEL							-BT: BT Cut
	BLANK = BULK PACK							

\*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 ~ 42.000 MHz	BT Cut Fundamental

<b>Operating Temperature:</b>	-10°C ~ +70°C	Standard
	-40°C ~ +85°C	

<b>Frequency Stability:</b>	±100 ppm	
	± 50 ppm	Standard
	± 30 ppm	
	± 15 ppm	

<b>Frequency Tolerance:</b>	±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

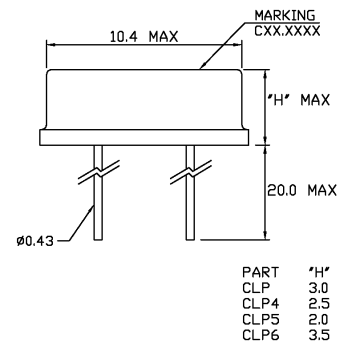
Note 1: Not all combinations of the above tolerances, stabilities, and temperature ranges are available. Consult the factory if your requirement is not standard.

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.

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

## CLP



## CLP3

