

# Ceramic Surface Mount Crystals

Series **CX17A**  
**CX17C**

The Cardinal CX17A and CX17C are epoxy sealed ceramic crystals. The advantages of short height (1.7 mm max), two different terminal patterns, and lower cost are combined in this popular Cardinal SMD crystal.

## Part Numbering Example: CX17A Z - A1 B2 C2 60 - 10.0 D18 - 3

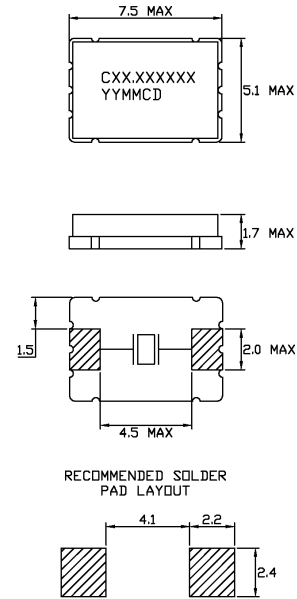
CX17A	Z	A1*	B2	C2	60	10.0	D18	- 3
SERIES	ADDED FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	RESISTANCE	FREQUENCY	LOAD CAP.	OVERTONE
CX17A	BLANK = BULK PACK	A0 = -10°C ~ +60°C	B1 = ±100	C1 = ±100	SEE CHART		D16,18,20,ETC.	BLANK: FUND.
CX17C	Z = TAPE AND REEL	A1 = -10°C ~ +70°C	B2 = ± 50	C2 = ± 50	BELOW		DS = SERIES	-3: 3rd OT
		A2 = -40°C ~ +85°C	B3 = ± 30	C3 = ± 30				-5: 5th OT
		A3 = -55°C ~ +125°C	B4 = ± 10	C4 = ± 10				-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.

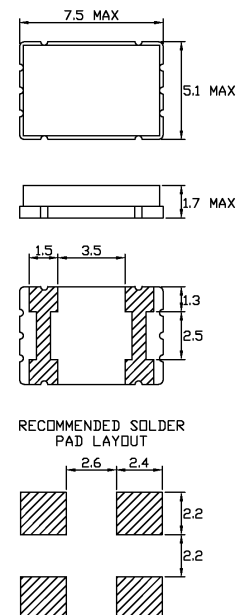
### Specifications:

<b>Frequency Range:</b>	10.000 ~ 100.000 MHz
<b>Operating Temperature:</b>	-10°C ~ +60°C <i>Standard</i> -40°C ~ +85°C
<b>Frequency Stability:</b>	±100 ppm <i>Standard</i> ± 50 ppm
<b>Frequency Tolerance:</b>	± 50 ppm <i>Standard</i> (at 25°C)
<b>Load Capacitance:</b>	Standard 16 pF or series. Other values are available.
<b>Resistance:</b>	Maximum resistance corresponds to frequency. See chart below.
<b>Standard:</b>	Mode: Fundamental, 3rd, or 5th Overtone Shunt Capacitance: 7 pF Max Aging: ± 5 ppm/year Drive Level: 100 µW Packaging: Tape and Reel (1K per Reel)

### CX17A



### CX17C



### 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
9.500~10.999	60 Max	Fund./AT	35.000~39.999	100 Max	3rd Overtone/AT
11.000~13.999	50 Max	Fund./AT	40.000~49.999	80 Max	3rd Overtone/AT
14.000~15.999	40 Max	Fund./AT	50.000~89.999	50 Max	3rd Overtone/AT
16.000~40.000	30 Max	Fund./AT	90.000~100.000	100 Max	5th Overtone/AT

