#### **CARDINAL COMPONENTS**

# **Ceramic Surface Mount Crystals**

- Very low drive level
- · Wide frequency range
- · Tight stabilities and tolerances

Series

**CX635A** CX635B





Part Numbering Example: CX635A Z - A1 B2 C2 50 - 11.0 D18 - 3

CX <sub>635</sub> A	Z	A <sub>1</sub> *	<b>B</b> 2	C <sub>2</sub>	50	11ְ.0	D18	- 3
SERIES ADDED	FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	RESISTANCE	FREQUENCY	LOAD CAP.	OVERTONE
CX635A BLANK =	<b>BULK PACK</b>	$A0 = -10^{\circ}C \sim +60^{\circ}C$	$B1 = \pm 100$	$C1 = \pm 100$	SEE CHART		D16,18,20,ETC.	BLANK: FUND.
CX635B Z = TAPE	AND REEL	$A1 = -10^{\circ}C \sim +70^{\circ}C$	$B2 = \pm 50$	$C2 = \pm 50$	BELOW		DS = SERIES	-3: 3rd OT
		$A2 = -40^{\circ}C \sim +85^{\circ}C$	$B3 = \pm 30$	$C3 = \pm 30$				-5: 5th OT
		$A3 = -55^{\circ}C \sim +125^{\circ}C$	$B4 = \pm 10$	$C4 = \pm 10$				-7: 7th OT
								-BT: BT Cut

<sup>\*</sup>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:	11.000 ~ 150.000 MHz				
Operating Temperature:	-10°C ~ +70°C Standard -20°C ~ +70°C -40°C ~ +85°C				
Frequency Stability:	±50 ppm Standard ±30 ppm ±10 ppm ± 5 ppm				
Frequency Tolerance: (at 25°C)	±50 ppm				
Load Capacitance:	Standard 18pF or series. Other values are available.				

Resistance: Maximum resistance corresponds to frequency.

See chart below.

Standard: Mode: Fundamental, 3rd or 5th Overtone

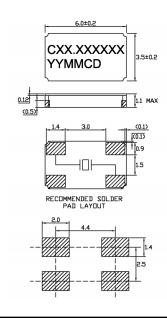
Shunt Capacitance: 7 pF Max

Aging: ± 5 ppm/year Drive Level: 50 µW

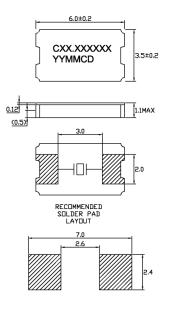
Packaging: Tape and Reel (1K per Reel)

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

## CX635A



#### **CX635B**



### Resistance Chart: All resistances are maximum

EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE)									
Free	quency MHz	<b>ESR (</b> Ω <b>)</b>	Oscillation Mode						
11.0	~ 13.99	50	Fundamental						
14.0	~ 24.99	40	Fundamental						
25.0	~ 54.99	30	Fundamental						
55.0	~ 100.00	70	3rd Overtone						
100.0	~ 150.00	100	5th Overtone						



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