

# Ultra Miniature Surface Mount Crystals

Series **CX45**

- Very low height
- Very low drive level
- Small size excellent for next generation products

**Part Numbering Example: CX45 - Z - A1 B2 C2 100 10.0 D18 - 3**

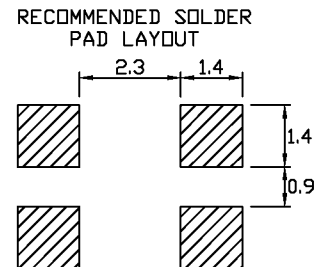
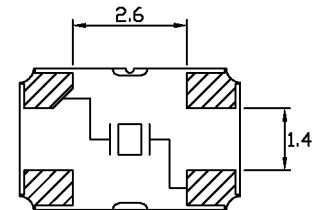
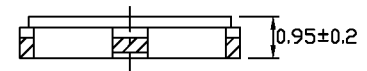
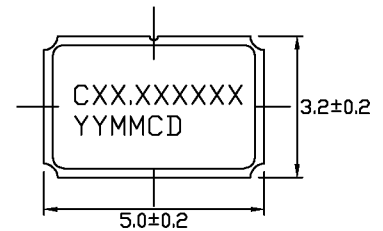
<b>CX45</b>	<b>Z</b>	<b>A1*</b>	<b>B2</b>	<b>C2</b>	<b>100</b>	<b>10.0</b>	<b>D18</b>	<b>- 3</b>
<b>SERIES</b>	<b>ADDED FEATURES</b>	<b>OPERATING TEMP.</b>	<b>STABILITY</b>	<b>TOLERANCE</b>	<b>RESISTANCE</b>	<b>FREQUENCY</b>	<b>LOAD CAP.</b>	<b>OVERTONE</b>
CX45	BLANK = BULK PACK Z = TAPE AND REEL	A0 = -10°C ~ +60°C A1 = -10°C ~ +70°C A2 = -40°C ~ +85°C A3 = -55°C ~ +125°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 -5: 5th OT -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 ~ 45.000 MHz	AT-Cut Fundamental
<b>Operating Temperature:</b>	-0°C ~ +60°C	Standard
	-40°C ~ +85°C	
<b>Frequency Stability:</b>	±100 ppm	AT-Cut
	± 50 ppm	Standard
	± 30 ppm	
	± 10 ppm	
<b>Frequency Tolerance:</b>	± 50 ppm	Standard
(at 25°C)		
<b>Load Capacitance:</b>	Please specify your required load.	
<b>Resistance:</b>	See chart below.	
<b>Standard:</b>	Shunt Capacitance: 7 pF Max	
	Aging: ± 5 ppm/year	
	Drive Level: 100 µW Max	
	Packaging: Tape and Reel	

**CX45**



**Resistance Chart: All resistances are maximum**

EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE)		
Frequency MHz	ESR (Ω)	Oscillation Mode
10.0 ~ 11.999	100	Fundamental
12.0 ~ 15.999	60	Fundamental
16.0 ~ 29.999	50	Fundamental
30.0 ~ 45.000	40	Fundamental

