

# 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**

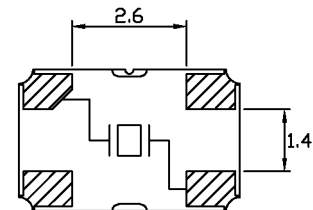
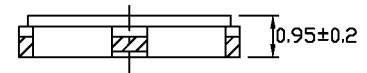
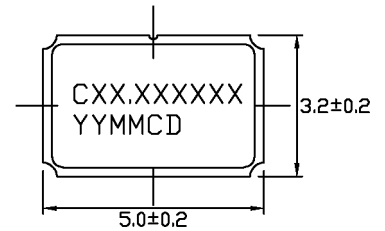
SERIES	ADDED FEATURES	OPERATING TEMP.	STABILITY	TOLERANCE	RESISTANCE	FREQUENCY	LOAD CAP.	OVERTONE
CX45	BLANK = BULK PACK Z = TAPE AND REEL	A0 = -10°C ~ +60°C A1 = -10°C ~ +70°C A2 = -40°C ~ +85°C A3 = -55°C ~ +125°C	B1 = ±100 B2 = ± 50 B3 = ± 30 B4 = ± 10	C1 = ±100 C2 = ± 50 C3 = ± 30 C4 = ± 10	SEE CHART BELOW	100 10.0	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.*

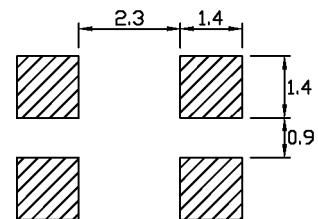
**Specifications:**

<b>Frequency Range:</b>	10.000~45.000 MHz
<b>Operating Temperature:</b>	AT-Cut Fundamental -0°C ~ +60°C <i>Standard</i> -40°C ~ +85°C
<b>Frequency Stability:</b>	±100 ppm AT-Cut ± 50 ppm <i>Standard</i> ± 30 ppm ± 10 ppm
<b>Frequency Tolerance:</b>	± 50 ppm <i>Standard</i> (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**



RECOMMENDED SOLDER PAD LAYOUT



**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

