

## Ultra Miniature Surface Mount Crystals

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

Series **CX45**

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

| 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<br>Z = TAPE AND REEL | A0 = -10°C ~ +60°C<br>A1 = -10°C ~ +70°C<br>A2 = -40°C ~ +85°C | B1 = ±100<br>B2 = ± 50<br>B3 = ± 30<br>B4 = ± 10 | C1 = ±100<br>C2 = ± 50<br>C3 = ± 30<br>C4 = ± 10 | SEE CHART<br>BELOW |           | D16,18,20,ETC.<br>DS = SERIES | BLANK: FUND.<br>-3: 3rd OT |

\*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: 8.000 ~ 80.000 MHZ

Operating Temperature: -0°C ~ +60°C Standard  
-40°C ~ +85°C

Frequency Stability: ±100 ppm AT-Cut  
± 50 ppm Standard  
± 30 ppm  
± 10 ppm

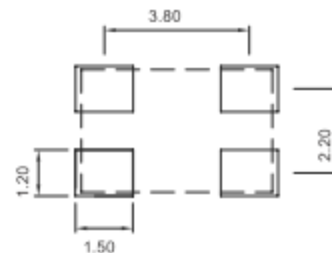
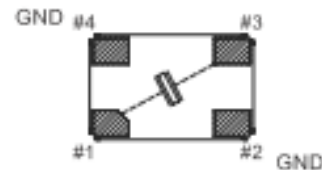
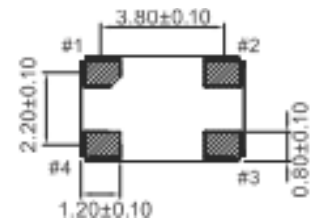
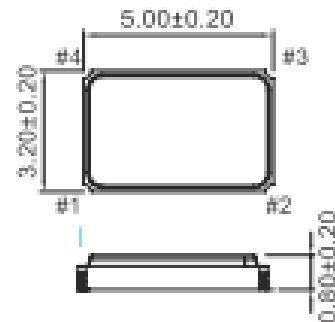
Frequency Tolerance: ± 50 ppm Standard  
(at 25°C)

Load Capacitance: Please specify your required load.

Resistance: See chart below.

Standard: 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

| Frequency Range          | MODE | E.S.R |
|--------------------------|------|-------|
| 8 MHz ≤ Fo < 11 MHz      | A1   | <100Ω |
| 11 MHz ≤ Fo < 12 MHz     | A1   | <65Ω  |
| 12 MHz ≤ Fo < 13 MHz     | A1   | <60Ω  |
| 13 MHz ≤ Fo < 16 MHz     | A1   | <55Ω  |
| 16 MHz ≤ Fo < 24 MHz     | A1   | <50Ω  |
| 24 MHz ≤ Fo < 48 MHz     | A1   | <45Ω  |
| 48 MHz ≤ Fo < 53.125 MHz | A1   | <40Ω  |
| Fo = 80 MHz              | A3   | <60Ω  |