

## 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**

| CX635A | Z                 | A1*                 | B2        | C2        | 50         | 11.0      | D18            | - 3          |
|--------|-------------------|---------------------|-----------|-----------|------------|-----------|----------------|--------------|
| SERIES | ADDED FEATURES    | OPERATING TEMP.     | STABILITY | TOLERANCE | RESISTANCE | FREQUENCY | LOAD CAP.      | OVERTONE     |
| CX635A | BLANK = BULK PACK | A0 = -10°C ~ +60°C  | B1 = ±100 | C1 = ±100 | SEE CHART  |           | D16,18,20,ETC. | BLANK: FUND. |
| CX635B | 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:

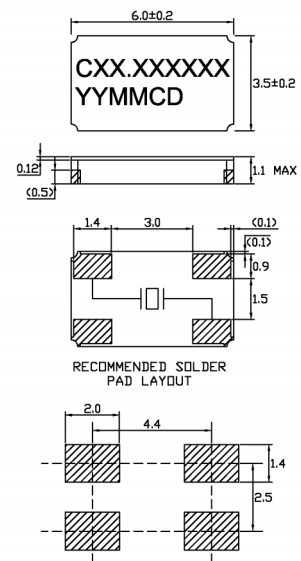
|                                          |                                                                                                                                                              |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Frequency Range:</b>                  | 11.000 ~ 150.000 MHz                                                                                                                                         |
| <b>Operating Temperature:</b>            | -10°C ~ +70°C <i>Standard</i><br>-20°C ~ +70°C<br>-40°C ~ +85°C                                                                                              |
| <b>Frequency Stability:</b>              | ±50 ppm <i>Standard</i><br>±30 ppm<br>±10 ppm<br>± 5 ppm                                                                                                     |
| <b>Frequency Tolerance:</b><br>(at 25°C) | ±50 ppm <i>Standard</i><br>±30 ppm<br>±10 ppm                                                                                                                |
| <b>Load Capacitance:</b>                 | Standard 18pF or series.<br>Other values are available.                                                                                                      |
| <b>Resistance:</b>                       | Maximum resistance corresponds to frequency.<br>See chart below.                                                                                             |
| <b>Standard:</b>                         | Mode: Fundamental, 3rd or 5th Overtone<br>Shunt Capacitance: 7 pF Max<br>Aging: ± 5 ppm/year<br>Drive Level: 50 µW<br>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.

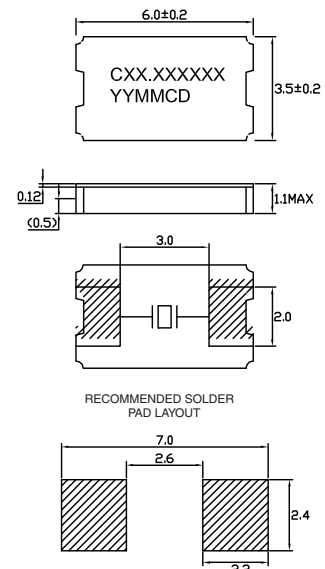
## Resistance Chart: All resistances are maximum

| EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE) |         |                  |
|--------------------------------------------------------------|---------|------------------|
| Frequency MHz                                                | ESR (Ω) | 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     |

## CX635A



## CX635B



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