

# PRODUKT-INFO

## CPX-42 SMD CRYSTAL

### FEATURES

1. Ultra-thin and small type surface mounting quartz crystal with height only 0.8 mm.
2. A highly reliable seam welding sealing is adopted to assure high realization and reflow soldering is possible.
3. Automatic mounting is enabled by emboss taping.



Actual Size

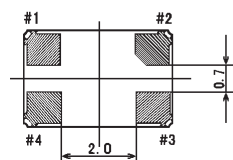
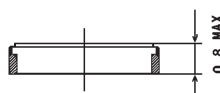
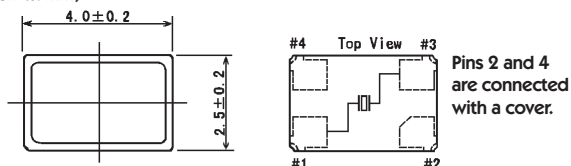


### APPLICATION

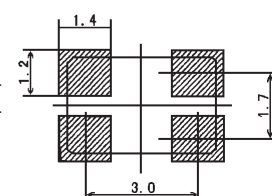
Cellphones, Bluetooth, Modems, Keyless-Go Systems, Automotive, etc.

| ELECTRICAL SPECIFICATIONS                 |                                                                                                                                                                                                                    |                       |           |                       |           |                       |           |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|
| <b>Model</b>                              | <b>CPX-42</b>                                                                                                                                                                                                      |                       |           |                       |           |                       |           |
| <b>Frequency Range</b>                    | 12.0 MHz ~ 54.0 MHz                                                                                                                                                                                                |                       |           |                       |           |                       |           |
| <b>Oscillation Mode / Crystal Cut</b>     | Fundamental / AT-cut                                                                                                                                                                                               |                       |           |                       |           |                       |           |
| <b>Load Capacitance (C<sub>L</sub>)</b>   | 8 pF ~ 12 pF (Customer Spec.)                                                                                                                                                                                      |                       |           |                       |           |                       |           |
| <b>Drive Level</b>                        | 100 μW (300 μW max.)                                                                                                                                                                                               |                       |           |                       |           |                       |           |
| <b>Frequency Tolerance (at +25°C)</b>     | ±10 ppm / ±15 ppm / ±30 ppm                                                                                                                                                                                        |                       |           |                       |           |                       |           |
| <b>Equivalent Series Resistance (ESR)</b> | <table border="1"> <tr> <td>12.0 MHz ~ 19.999 MHz</td> <td>80 Ω max.</td> </tr> <tr> <td>20.0 MHz ~ 25.999 MHz</td> <td>70 Ω max.</td> </tr> <tr> <td>26.0 MHz ~ 54.000 MHz</td> <td>50 Ω max.</td> </tr> </table> | 12.0 MHz ~ 19.999 MHz | 80 Ω max. | 20.0 MHz ~ 25.999 MHz | 70 Ω max. | 26.0 MHz ~ 54.000 MHz | 50 Ω max. |
| 12.0 MHz ~ 19.999 MHz                     | 80 Ω max.                                                                                                                                                                                                          |                       |           |                       |           |                       |           |
| 20.0 MHz ~ 25.999 MHz                     | 70 Ω max.                                                                                                                                                                                                          |                       |           |                       |           |                       |           |
| 26.0 MHz ~ 54.000 MHz                     | 50 Ω max.                                                                                                                                                                                                          |                       |           |                       |           |                       |           |
| <b>Frequency Stability</b>                | ±10 ppm / ±15 ppm / ±30 ppm                                                                                                                                                                                        |                       |           |                       |           |                       |           |
| <b>Operating Temperature Range</b>        | -20°C to +70°C, -40°C to +85°C option                                                                                                                                                                              |                       |           |                       |           |                       |           |
| <b>Storage Temperature Range</b>          | -40°C to +85°C                                                                                                                                                                                                     |                       |           |                       |           |                       |           |
| <b>Aging (at +25°C) first year</b>        | ±2 ppm / year max.                                                                                                                                                                                                 |                       |           |                       |           |                       |           |

Dimensions (Units: mm)



Recommended Solder Pattern



4.0 x 2.5 x 0.8

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and more*

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All specifications subject to change without notice.