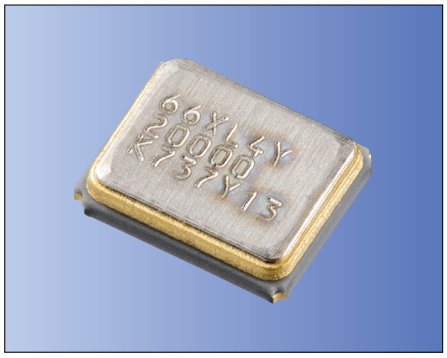
## 2.0 × 1.6mm for Consumer Products/ Automotive



AEC-Q200 RoHS Compliant
PSL: R4Y MSL1

## How to Order

CX2016SA 25000 D0 G S S HH
① ② ③④ ⑤ ⑥ ⑦ ⑧

Packaging
(Tape & Reel 3000/ 15000 pcs./ reel)

①Series (Type and Size)
②Frequency (16,000 to 60,000kHz)
③④Load Capacitance (Unit:pF) Ex.: D1:8.1pF

| ③Integer part | |
|---|---|
| D | 8 |
| E | 9 |
| F | 10 |
| G | 11 |
| H | 12 |
| Z | Special suffix |

| ④After the decimal point | |
|---|---|
| 0 | .0 |
| 1 | .1 |
| 2 | .2 |
| 3 | .3 |
| 4 | .4 |
| 5 | .5 |
| 6 | .6 |
| 7 | .7 |
| 8 | .8 |
| 9 | .9 |

⑤Frequency Tolerance

| | |
|---|---|
| F | ±10×10⁻⁶ |
| G | ±15×10⁻⁶ |
| H | ±20×10⁻⁶ |
| J | ±25×10⁻⁶ |
| K | ±30×10⁻⁶ |
| M | ±40×10⁻⁶ |
| P | ±50×10⁻⁶ |
| W | All Over |
| Z | Special suffix |

## Features

- Support a wide range of applications
- Ultra-miniature and low profile (2.05 × 1.65 × 0.45mm)
- Ceramic package
- Reflow compatible

## Applications

- ECU • Automotive Camera
- Digital Electronics • Consumer Products

⑥Operating Temp. Range ⑦Frequency Temp. Stability

| ⑥ \ ⑦ | | J ±15ppm | L ±20ppm | Q ±30ppm | R ±40ppm | S ±50ppm | T ±100ppm | V ±150ppm | W ±200ppm |
|---|---|---|---|---|---|---|---|---|---|
| L | -30 to 85°C | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| P | -40 to 85°C | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| R | -40 to 105°C | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| S | -40 to 125°C | | | | | ✓ | ✓ | ✓ | ✓ |
| T | -40 to 150°C | | | | | | ✓ | ✓ | ✓ |

⑧Individual Specification (STD Specification are "HH" and "JJ" *.)
* "JJ" is made overseas. Please contact us for supported frequencies.

## Specifications

| Item | Symbol | Specification | | | Unit | Remarks |
|---|---|---|---|---|---|---|
| Frequency Range | f_nom | 16000 to 60000 | | | kHz | Please contact us for other frequency range. |
| Overtone Order | OT | Fundamental | | | — | |
| Load Capacitance | CL | 8 | | | pF | Please contact us for other CL requirements. |
| Frequency Tolerance | f_tol | ±15 | | | ×10⁻⁶ | 25° C ± 3° C |
| Motional Series Resistance | R1 | Table 1 | | | ohm | |
| Drive Level | DL | 10μW(200μW max.) | | | μW | |
| Operating Temp. Range | T_use | −40 to +125 | −40 to +150 | −30 to +85 | °C | |
| Storage Temp. Range | T_stg | −40 to +150 | | | °C | |
| Frequency Temp. Characteristics | f_tem | ±50 | ±200 | ±20 | ×10⁻⁶ | Freq. deviation from the value at 25° C |
| Shunt capacitance | C0 | 2.0max. | | | pF | |

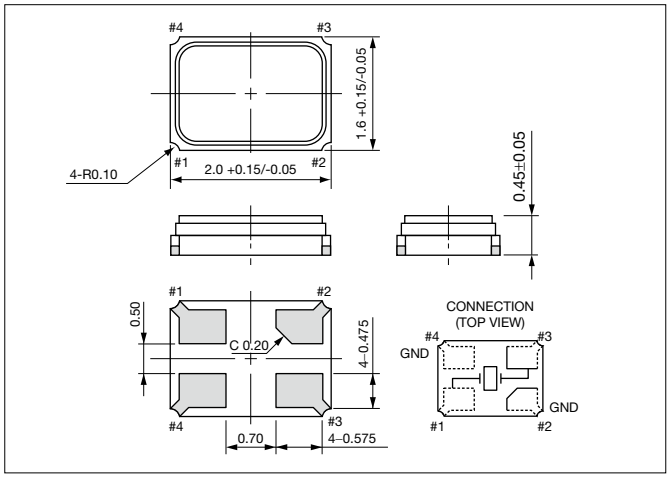
Please contact us for other specifications.

◆Table 1
Motional Series Resistance ESR (C1)

| Frequency (MHz) | ESR (Ohm) |
|---|---|
| 16≦F<18 | 200 |
| 18≦F<20 | 150 |
| 20≦F<24 | 100 |
| 24≦F<26 | 80 |
| 26≦F<40 | 60 |
| 40≦F≦60 | 50 |

## Dimensions

(Unit: mm)




## Recommended Land Pattern

(Unit: mm)

