

5.0×3.2mm for Automotive



RoHS Compliant

### Features

- Crystal unit for automotive electronics
- Improved solderability
- Using ceramic package resulting in high reliability
- Small and low profile
- Improved rust prevention performance
- Reflow compatible
- AEC-Q200 qualified

### Applications

- ECU • TPMS
- High-Speed Automotive Network (Flex Ray™ etc.)

### How to Order

CX5032SA 08000 □□ □□ □□ □□

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series
- ② Frequency
- ③ Load Capacitance
- ④ Frequency Tolerance

<b>D0</b>	8 pF	<b>P</b>	±50×10 <sup>-6</sup>
<b>F0</b>	10 pF	<b>Q</b>	±100×10 <sup>-6</sup>
<b>H0</b>	12 pF		

- ⑤ Operating Temp. Range
- ⑥ Frequency Temp. Stability

<b>SV</b>	-40 to +125°C	±150×10 <sup>-6</sup>
<b>TW</b>	-40 to +150°C	±200×10 <sup>-6</sup>

- ⑦ Individual Specification

Packaging (Tape & Reel 5000/ 1000 pcs./ reel)

### Specifications

Item	Symbol	Specification	Units	Remarks
Frequency Range	f <sub>nom</sub>	8000 to 40000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	8	pF	
Frequency Tolerance	f <sub>tol</sub>	±50	×10 <sup>-6</sup>	25°C±3°C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	Table 2	μW	
Operating Temp. Range	T <sub>use</sub>	-40 to +150	°C	
Storage Temp. Range	T <sub>stg</sub>	-40 to +150	°C	
Frequency Temp. Characteristics	f <sub>tem</sub>	±200	×10 <sup>-6</sup>	Freq. deviation from the value at 25°C

• Please contact us for other specifications.

#### Table1 Motional Series Resistance

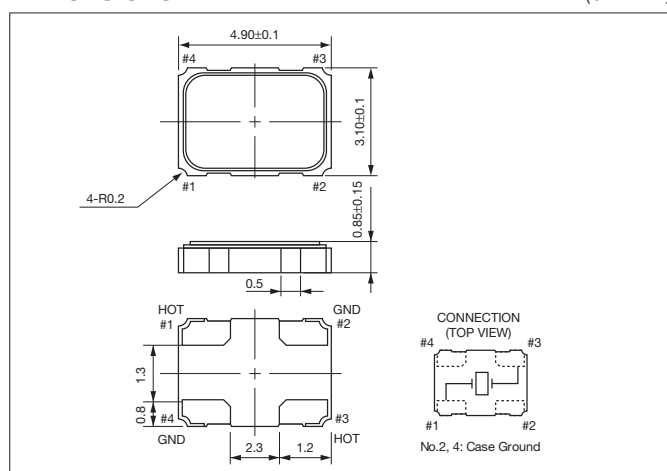
Frequency Range	Motional Series Resistance
8000≤f <sub>nom</sub> < 9000kHz	200Ω max.
9000≤f <sub>nom</sub> <12000kHz	150Ω max.
12000≤f <sub>nom</sub> <20000kHz	100Ω max.
20000≤f <sub>nom</sub> ≤40000kHz	50Ω max.

#### Table2 Level of Drive

Frequency Range	Level of Drive
8000≤f <sub>nom</sub> ≤40000kHz	10μW (100μW max.)

### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)

