

5.0×3.2mm for Automotive



**Pb Free**

**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 certified

**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 Stability

<b>DO</b>	8 pF	—	<b>P</b>	±50×10 <sup>-6</sup>	Std.
<b>FO</b>	10 pF	—	<b>Q</b>	±100×10 <sup>-6</sup>	—
<b>HO</b>	12 pF	Std.			

- 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>	Std.

- ⑦ Individual Specification

**Specifications**

Item	Symbol	Specification	Units	Remarks
Frequency Range	f <sub>nom</sub>	8000 to 40000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	12	pF	
Frequency Stability	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.

Typical Frequencies and Part Numbers

Frequency (kHz)	Part Number
<b>8000.000</b>	CX5032SA08000H0PTWZ1
<b>9843.750</b>	CX5032SA09843H0PTWZ1
<b>10000.000</b>	CX5032SA10000H0PTWZ1
<b>12000.000</b>	CX5032SA12000H0PTWZ1
<b>13560.000</b>	CX5032SA13560H0PTWZ1
<b>15000.000</b>	CX5032SA15000H0PTWZ1
<b>16000.000</b>	CX5032SA16000H0PTWZ1
<b>18000.000</b>	CX5032SA18000H0PTWZ1
<b>20000.000</b>	CX5032SA20000H0PTWZ1
<b>24000.000</b>	CX5032SA24000H0PTWZ1
<b>25000.000</b>	CX5032SA25000H0PTWZ1

**Table1 Motional Series Resistance**

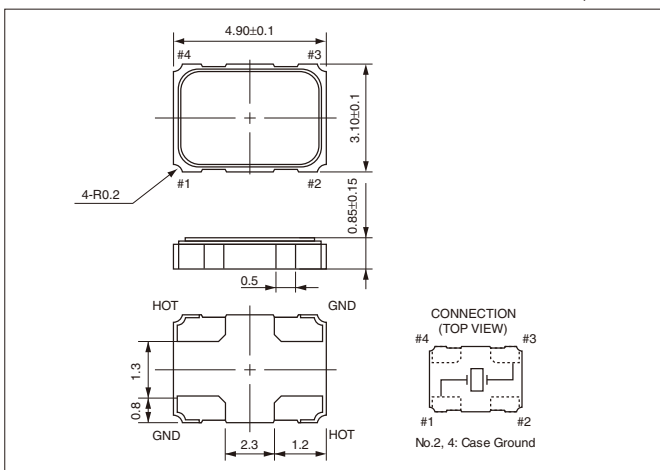
Frequency Range	Motional Series Resistance
<b>8000 to 8999kHz</b>	200Ω max.
<b>9000 to 11999kHz</b>	150Ω max.
<b>12000 to 19999kHz</b>	100Ω max.
<b>20000 to 40000kHz</b>	50Ω max.

**Table2 Level of Drive**

Frequency Range	Level of Drive
<b>8000 to 40000kHz</b>	10μW (100μW max.)

**Dimensions**

(Unit: mm)



**Recommended Land Pattern**

(Unit: mm)

