

5.0×3.2mm for Automotive



RoHS Compliant

**Features**

- Crystal unit for automotive electronics
- Improved solderability
- Ceramic package
- Small and low profile
- Improved rust prevention performance
- Reflow compatible
- AEC-Q200 qualified

**Applications**

- ECU
- TPMS
- High-Speed Automotive Network

**How to Order**

**CX5032SA 08000 HO P T V Z1**  
① ② ③ ④ ⑤ ⑥ ⑦

① Series	② Frequency
③ Load Capacitance	④ Frequency Tolerance
<b>HO</b> 12 pF	<b>P</b> ±50×10 <sup>-6</sup>
⑤ Operating Temp. Range	⑥ Frequency Temp. Stability
<b>TV</b> -40 to +150°C	±150×10 <sup>-6</sup>

⑦ Individual Specification (STD Specification is "Z1")

Packaging (Tape & Reel 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	12	pF	Please contact us for other Load Capacitance.
Frequency Tolerance	f <sub>tol</sub>	±15	×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>	±150	×10 <sup>-6</sup>	Freq. deviation from the value at 25°C

Please contact us for other specifications.

**Table1 Motional Series Resistance**

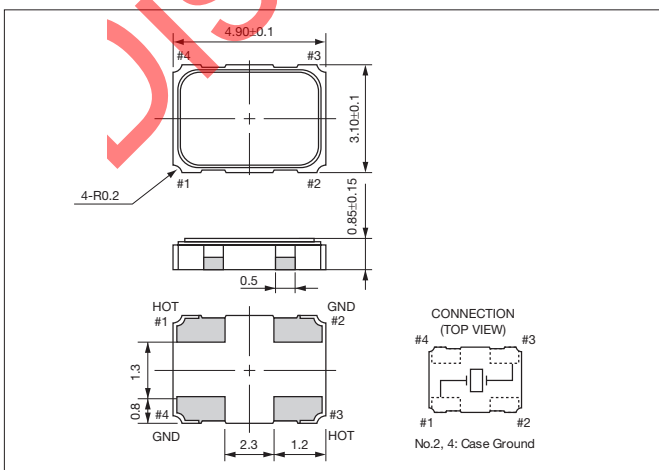
Frequency Range	Motional Series Resistance
8000 ≤ f <sub>nom</sub> < 9000kHz	200Ω max.
9000 ≤ f <sub>nom</sub> < 12000kHz	150Ω max.
12000 ≤ f <sub>nom</sub> < 20000kHz	100Ω max.
20000 ≤ f <sub>nom</sub> ≤ 40000kHz	50Ω max.

**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)

