

3.2×2.5mm for Automotive



RoHS Compliant

**Features**

- Crystal unit for automotive electronics
- Small and low profile (3.2×2.5×0.80mm)
- Ceramic package
- Reflow compatible
- AEC-Q200 qualified

**Applications**

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

**How to Order**

CX3225CA 16000 [ ] [ ] [ ] [ ] [ ] [ ]  
 (1) (2) (3) (4) (5) (6) (7)

- ① Series      ② Frequency  
 ③ Load Capacitance      ④ Frequency Stability
- |           |      |      |          |                      |      |
|-----------|------|------|----------|----------------------|------|
| <b>D0</b> | 8 pF | Std. | <b>P</b> | ±50×10 <sup>-6</sup> | Std. |
|-----------|------|------|----------|----------------------|------|
- ⑤ Operating Temp. Range      ⑥ Frequency Temp. Stability
- |           |               |                       |      |
|-----------|---------------|-----------------------|------|
| <b>SW</b> | -40 to +125°C | ±200×10 <sup>-6</sup> | Std. |
|-----------|---------------|-----------------------|------|
- ⑦ Individual Specification

Packaging (Tape & Reel 3000 pcs./ reel)

**Specifications**

Item	Symbol	Specification	Units	Remarks
Frequency Range	f <sub>nom</sub>	9800 to 54000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	8	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 +125	°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
9843.750	CX3225CA09843D0PSWZ1
10000.000	CX3225CA10000D0PSWZ1
12000.000	CX3225CA12000D0PSWZ1
12800.000	CX3225CA12800D0PSWZ1
13560.000	CX3225CA13560D0PSWZ1
16000.000	CX3225CA16000D0PSWZ1
19200.000	CX3225CA19200D0PSWZ1
20000.000	CX3225CA20000D0PSWZ1
24000.000	CX3225CA24000D0PSWZ1
26000.000	CX3225CA26000D0PSWZ1
28636.360	CX3225CA28636D0PSWZ1
32000.000	CX3225CA32000D0PSWZ1
40000.000	CX3225CA40000D0PSWZ1

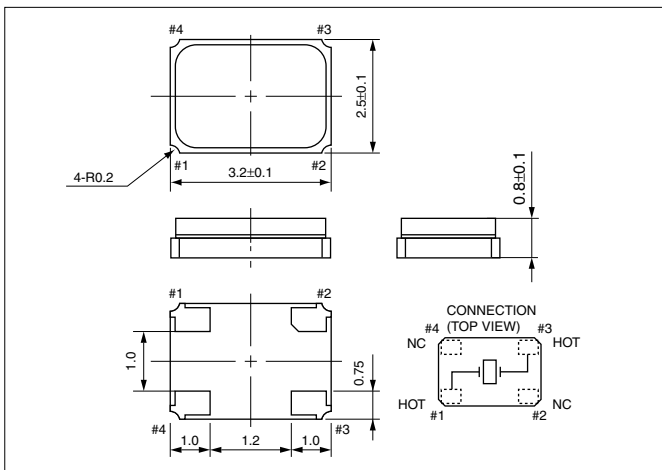
**Table1 Motional Series Resistance**      **Table2 Level of Drive**

Frequency Range	Motional Series Resistance
9800 to 11999kHz	500Ω max.
12000 to 13999kHz	300Ω max.
14000 to 15999kHz	200Ω max.
16000 to 19999kHz	100Ω max.
20000 to 26999kHz	100Ω max.
27000 to 54000kHz	100Ω max.

Frequency Range	Level of Drive
9800 to 54000kHz	10μW (200μW max.)

**Dimensions**

(Unit: mm)



**Recommended Land Pattern**

(Unit: mm)

