

# 3.2×2.5mm for Automotive



#### **Features**

- Crystal unit for automotive electronics
- · Improved solderability
- Improved mounting stability with 4 terminals
- Improved anti-noise performance with GND terminal
- · Ceramic package
- Small and low profile
- Improved rust prevention performance
- Reflow compatible
- Highly reliable solder junction (3000 heat cycles -40 to +125°C)

### **Applications**

- ECU
- TPMS
- High-Speed Automotive Network

### How to Order

CX3225SA 12000 D0 G T V CC ① ② ③ ④ ⑤ ⑥ ⑦

①Series ③Load Capacitance ©Frequency • Frequency Tolerance

±150×10<sup>-6</sup>

0 8 pF G ±15×10<sup>-6</sup>

©Operating Temp. Range @Frequency Temp. Stability

TV -40 to +150°C

①Individual Specification
(STD Standard is "CC".)

Packaging (Tape & Reel 3000 pcs./ reel)

### **Specifications**

Specifications				
Item	Symbol	Specification	Unit	Remarks
Frequency Range	f_nom	8, 10, 12, 15, 16, 20, 24, 26, 27, 40	MHz	Please contact us for other frequency range.
Overtone Order	ОТ	Fundamental	_	
Load Capacitance	CL	8	pF	Please contact us for other CL requirements.
Frequency Tolerance	f_tol	±15	×10 <sup>-6</sup>	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 +150	°C	
Storage Temp. Range	T_stg	-40 to +150	°C	
Frequency Temp. Characteristics	f_tem	±150	×10 <sup>-6</sup>	Freq. deviation from the value at 25°C

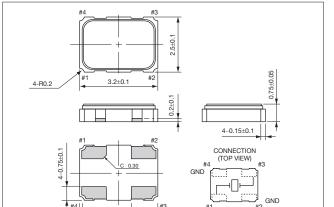
(Unit: mm)

Please contact us for other specifications.

Table 1 Motional Series Resistance Please contact us for other frequency range.

Frequency	Motional Series Resistance		
8MHz	500 Ω max.		
12MHz	200 Ω max.		
16MHz	60 Ω max.		
20MHz	50 Ω max.		

# Dimensions



4-1.15±0.1

4-0.11±0.1

#### Recommended Land Pattern

(Unit: mm)

