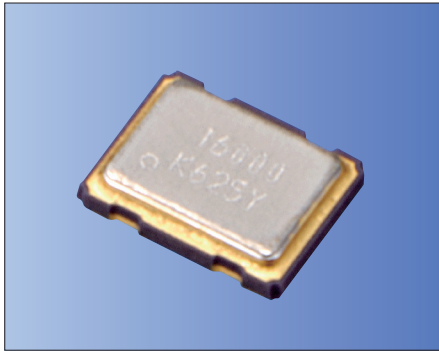




3.2x2.5mm for Automotive



AEC-Q200 RoHS Compliant

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 F T V
 ① ② ③ ④ ⑤ ⑥ ⑦

①Series	②Frequency
③Load Capacitance	④Frequency Tolerance
D0 8 pF	F ±10×10 ⁻⁶
⑤Operating Temp. Range	⑥Frequency Temp. Stability
TV -40 to +150°C	±150×10 ⁻⁶
SS -40 to +125°C	±50×10 ⁻⁶

⑦Individual Specification
(STD Specification is "HH")

Packaging (Tape & Reel 3000 pcs./ reel)

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	OT	Fundamental	—	
Load Capacitance	CL	8	pF	Please contact us for other CL requirements.
Frequency Tolerance	f _{tol}	±10	×10 ⁻⁶	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 / -40 to +125	°C	
Storage Temp. Range	T _{stg}	-40 to +150	°C	
Frequency Temp. Characteristics	f _{tem}	±150 / ±50	×10 ⁻⁶	Freq. deviation from the value at 25°C

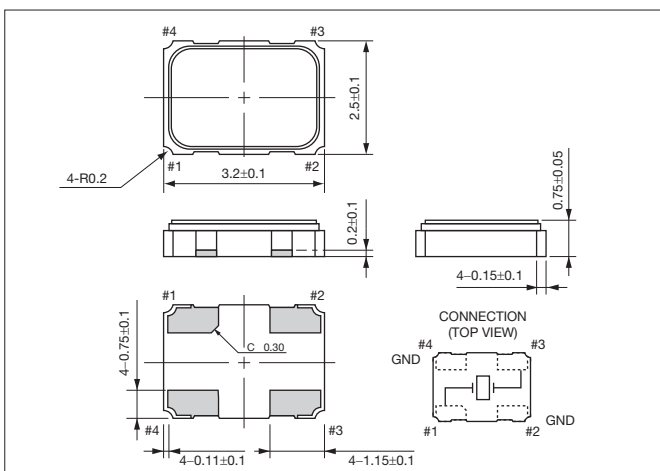
Please contact us for other specifications.

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

Frequency	Motional Series Resistance
8000≤f _{nom} <9800kHz	500Ω max.
9800≤f _{nom} <12000kHz	200Ω max.
12000≤f _{nom} <16000kHz	120Ω max.
16000≤f _{nom} <20000kHz	60Ω max.
20000≤f _{nom} ≤54000kHz	50Ω max.

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

