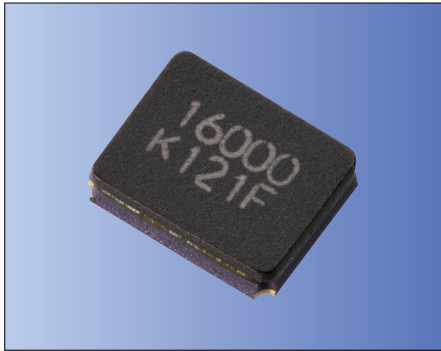




3.2 × 2.5mm for Automotive



AEC-Q200 RoHS Compliant
PSL: R4Y MSL1

How to Order

CX3225CA 16000 D0 G S S HH
① ② ③④ ⑤ ⑥ ⑦ ⑧

- ① Series (Type and Size)
- ② Frequency (12,000 to 54,000kHz)
- ③④ Load Capacitance (Unit:pF) Ex.: D1:8.1pF

③ Integer part		④ After the decimal point	
D	8	0	.0
E	9	1	.1
F	10	2	.2
G	11	3	.3
H	12	4	.4
Z	Special suffix	5	.5
		6	.6
		7	.7
		8	.8
		9	.9

Packaging
(Tape & Reel 3000 pcs./ reel)

⑤ Frequency Tolerance

H	±20×10 ⁻⁶
J	±25×10 ⁻⁶
K	±30×10 ⁻⁶
M	±40×10 ⁻⁶
P	±50×10 ⁻⁶
W	All Over
Z	Special suffix

Features

- Crystal unit for automotive electronics
- Small and low profile (3.2 × 2.5 × 0.8mm)
- Ceramic package
- Reflow compatible

Applications

- ECU
- High-Speed Automotive Network

⑥ Operating Temp. Range ⑦ Frequency Temp. Stability

⑥	⑦	Q	R	S	T	V	W
		±30ppm	±40ppm	±50ppm	±100ppm	±150ppm	±200ppm
L	-30 to 85°C	✓	✓	✓	✓	✓	✓
P	-40 to 85°C	✓	✓	✓	✓	✓	✓
R	-40 to 105°C		✓	✓	✓	✓	✓
S	-40 to 125°C			✓	✓	✓	✓
T	-40 to 150°C				✓	✓	✓

⑧ Individual Specification (STD Specification is "HH" .)

Specifications

Item	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	12000 to 54000	kHz	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}	± 20	× 10 ⁻⁶	25° C ± 3° C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	10 μ W(200 μ W max.)	μ W	
Operating Temp. Range	T _{use}	- 40 to +125	° C	
Storage Temp. Range	T _{stg}	- 40 to +150	° C	
Frequency Temp. Characteristics	f _{tem}	± 50	× 10 ⁻⁶	Freq. deviation from the value at 25° C
Shunt capacitance	C0	3.0max.	pF	

Please contact us for other specifications.

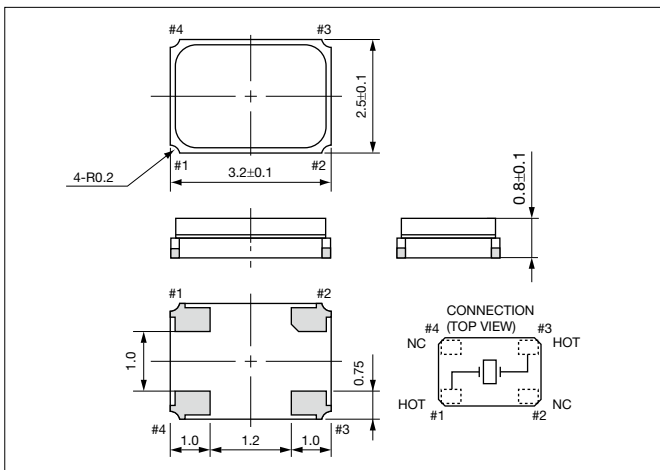
◆Table 1
Motional Series Resistance ESR (C1)

Frequency (MHz)	ESR (Ohm)
12 ≤ F < 20	120
20 ≤ F ≤ 54	100

Crystal Units

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

