

3.2×2.5mm for Consumer Products/ Mobile Communications/ Automotive


**RoHS Compliant**

### Features

- Crystal unit for Consumer Products
- Miniature and low profile (3.2×2.5×0.55mm)
- Ceramic package
- Reflow compatible
- AEC-Q200 qualified
- (Please contact us for Automotive use)

### Applications

- Digital Electronics
- Consumer Products
- Car Electronics
- Mobile Communications, Bluetooth®, Wireless LAN

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### How to Order

**CX3225SB 12000**

① ② ③ ④ ⑤ ⑥ ⑦

① Series      ② Frequency  
 ③ Load Capacitance      ④ Frequency Tolerance

**D0** 8 pF **G**  $\pm 15 \times 10^{-6}$

⑤ Operating Temp. Range      ⑥ Frequency Temp. Stability

**EJ** -10 to +70°C  $\pm 15 \times 10^{-6}$

**LJ** -30 to +85°C  $\pm 15 \times 10^{-6}$

**SS** -40 to +125°C  $\pm 50 \times 10^{-6}$

⑦ Individual Specification

Packaging (Tape & Reel 1000/ 3000 pcs./ reel)

### Specifications

Item	Symbol	Specification	Units	Remarks
<b>Frequency Range</b>	$f_{nom}$	12000 to 54000	kHz	
<b>Overtone Order</b>	OT	Fundamental	—	
<b>Load Capacitance</b>	CL	8	pF	Please contact us for other Load Capacitance.
<b>Frequency Tolerance</b>	$f_{tol}$	$\pm 15$	$\times 10^{-6}$	$25^\circ\text{C} \pm 3^\circ\text{C}$
<b>Motional Series Resistance</b>	R1	Table 1	ohm	
<b>Drive Level</b>	DL	Table 2	$\mu\text{W}$	
<b>Operating Temp. Range</b>	$T_{use}$	-10 to +70   -30 to +85   -40 to +125	°C	
<b>Storage Temp. Range</b>	$T_{stg}$	-40 to +85	-40 to +125	°C
<b>Frequency Temp. Characteristics</b>	$f_{tem}$	$\pm 15$	$\pm 50$	$\times 10^{-6}$
Freq. deviation from the value at $25^\circ\text{C}$				

Please contact us for other specifications.

**Table1 Motional Series Resistance**

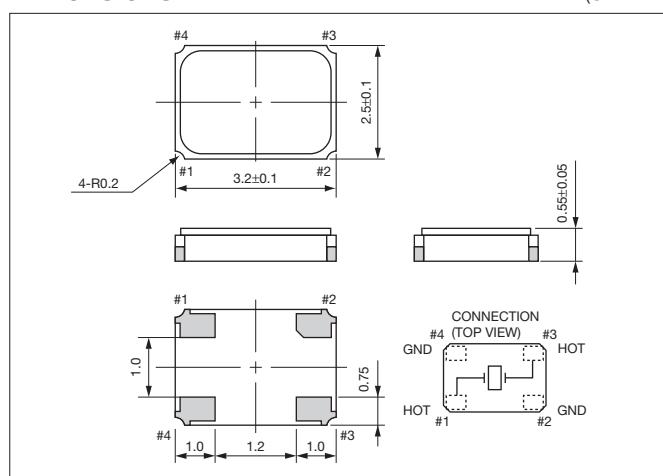
Frequency Range	Motional Series Resistance
$12000 \leq f_{nom} < 13000 \text{kHz}$	150Ω max.
$13000 \leq f_{nom} < 20000 \text{kHz}$	80Ω max.
$20000 \leq f_{nom} \leq 54000 \text{kHz}$	50Ω max.

**Table2 Level of Drive**

Frequency Range	Level of Drive
$12000 \leq f_{nom} \leq 54000 \text{kHz}$	10μW (100μW max.)

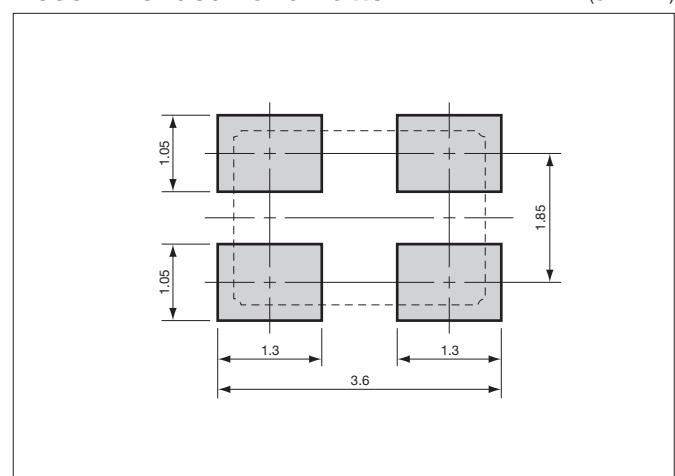
### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[AVX:](#)

[CX3225SB12000H0PSTC1](#) [CX3225SB24000H0PSTC1](#) [CX3225SB16000H0PSTC1](#) [CX3225SB32000D0PSTC1](#)  
[CX3225SB20000H0PSTC2](#)