

Ph Free

RoHS Compliant

### Features

- Crystal unit for Consumer Products
- Ultra-miniature and low profile (2.5x2.0x0.45mm)
- Ceramic package
- A lead free product
- Reflow compatible

### Applications

- Digital Electronics
- Consumer Products

### How to Order

CX2520SB 13560 □□ □ □ □ □ □ □

- ① Series                                    ② Frequency  
③ Load Capacitance                  ④ Frequency Stability
- |           |      |      |          |                         |      |
|-----------|------|------|----------|-------------------------|------|
| <b>B0</b> | 6 pF | —    | <b>P</b> | $\pm 50 \times 10^{-6}$ | Std. |
| <b>D0</b> | 8 pF | Std. |          |                         |      |
- ⑤ Operating Temp. Range   ⑥ Frequency Temp. Stability
- |           |              |                         |      |
|-----------|--------------|-------------------------|------|
| <b>ES</b> | -10 to +70°C | $\pm 50 \times 10^{-6}$ | Std. |
|-----------|--------------|-------------------------|------|
- ⑦ Individual Specification... Std.Spec. as "ZZ"

### Specifications

Item	Symbol	Specification	Units	Remarks
Frequency Range	f <sub>nom</sub>	13560 to 60000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	8	pF	
Frequency Stability	f <sub>tol</sub>	±50	$\times 10^{-6}$	@ 25°C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	Table 2	µW	
Operating Temp. Range	T <sub>use</sub>	-10 to +70	°C	
Storage Temp. Range	T <sub>stg</sub>	-40 to +85	°C	
Frequency Temp. Characteristics	f <sub>tem</sub>	±50	$\times 10^{-6}$	ref. @ 25°C over operating temperature range

\* Please contact us for other specifications.

### Typical Frequencies and Part Numbers

Frequency (kHz)	Standard Part Number
13560.000	CX2520SB13560D0PESZZ
16000.000	CX2520SB16000D0PESZZ
18000.000	CX2520SB18000D0PESZZ
20000.000	CX2520SB20000D0PESZZ
24000.000	CX2520SB24000D0PESZZ
26000.000	CX2520SB26000D0PESZZ
27000.000	CX2520SB27000D0PESZZ
27120.000	CX2520SB27120D0PESZZ
30000.000	CX2520SB30000D0PESZZ
32000.000	CX2520SB32000D0PESZZ
33000.000	CX2520SB33000D0PESZZ
33333.000	CX2520SB33333D0PESZZ
40000.000	CX2520SB40000D0PESZZ
48000.000	CX2520SB48000D0PESZZ
54000.000	CX2520SB54000D0PESZZ

### Table1 Motional Series Resistance

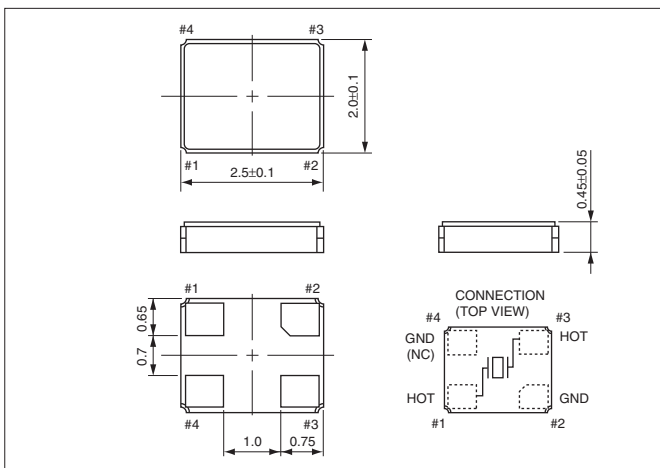
Frequency Range	Motional Series Resistance	Units
13560 to 15999kHz	300 max.	ohm
16000 to 19999kHz	150 max.	
20000 to 39999kHz	100 max.	
40000 to 60000kHz	50 max.	

### Table2 Level of Drive

Frequency Range	Drive Level	Units
13560 to 60000kHz	10 (100 max.)	µW

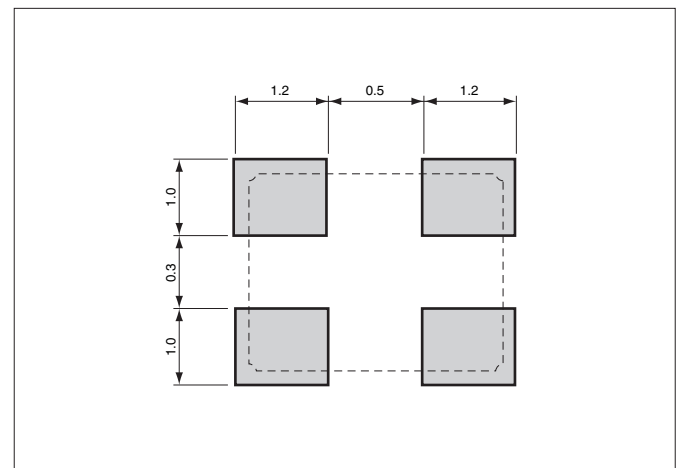
### Dimensions

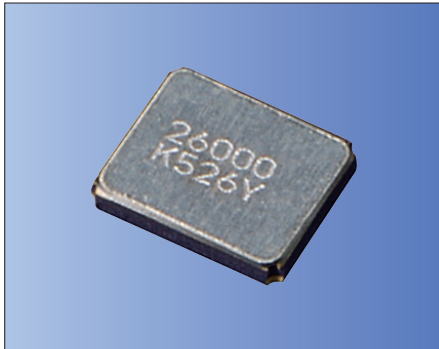
(Unit: mm)



### Recommended Land Pattern

(Unit: mm)





Ph Free

RoHS Compliant

### Features

- Reference frequency for telecommunication systems
- Reflow compatible
- Using ceramic package resulting in high reliability
- Small and low profile

### Applications

- Mobile Communications, Bluetooth, Wireless LAN

### How to Order

**CX2520SB 26000**

- ① Series      ② Frequency  
③ Load Capacitance      ④ Frequency Stability
- |           |      |      |          |                         |      |
|-----------|------|------|----------|-------------------------|------|
| <b>B0</b> | 6 pF | —    | <b>F</b> | $\pm 10 \times 10^{-6}$ | Std. |
| <b>D0</b> | 8 pF | Std. | <b>G</b> | $\pm 15 \times 10^{-6}$ | —    |
- ⑤ Operating Temp. Range    ⑥ Frequency Temp. Stability
- |           |              |                         |      |
|-----------|--------------|-------------------------|------|
| <b>FF</b> | −20 to +70°C | $\pm 10 \times 10^{-6}$ | —    |
| <b>LJ</b> | −30 to +85°C | $\pm 15 \times 10^{-6}$ | Std. |
- ⑦ Individual Specification... Std.Spec. as "ZZ"

### Specifications

Item	Symbol	Specification	Units	Remarks
Frequency Range	$f_{nom}$	13560 to 60000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	8	pF	
Frequency Stability	$f_{tol}$	$\pm 10$	$\times 10^{-6}$	@ 25°C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	Table 2	$\mu W$	
Operating Temp. Range	$T_{use}$	−30 to +85	°C	
Storage Temp. Range	$T_{stg}$	−40 to +85	°C	
Frequency Temp. Characteristics	$f_{tem}$	$\pm 15$	$\times 10^{-6}$	ref. @ 25°C over operating temperature range

\* Please contact us for other specifications.

### Typical Frequencies and Part Numbers

Frequency (kHz)	Standard Part Number
13560.000	CX2520SB13560D0FLJZZ
16000.000	CX2520SB16000D0FLJZZ
18000.000	CX2520SB18000D0FLJZZ
19200.000	CX2520SB19200D0FLJZZ
24000.000	CX2520SB24000D0FLJZZ
26000.000	CX2520SB26000D0FLJZZ
27120.000	CX2520SB27120D0FLJZZ
32000.000	CX2520SB32000D0FLJZZ
38400.000	CX2520SB38400D0FLJZZ
40000.000	CX2520SB40000D0FLJZZ
44000.000	CX2520SB44000D0FLJZZ
54000.000	CX2520SB54000D0FLJZZ

### Table1 Motional Series Resistance

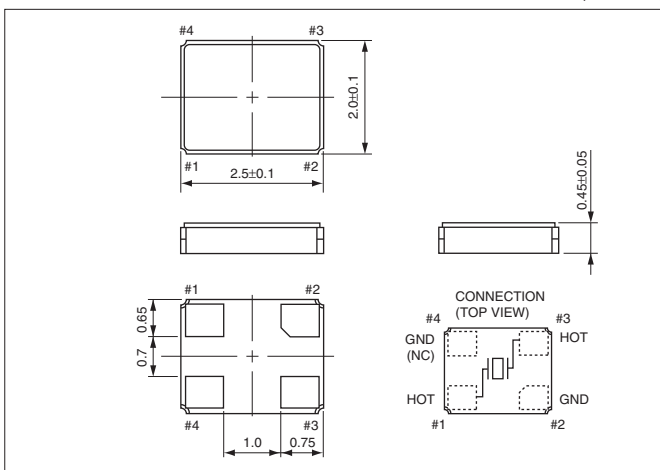
Frequency Range	Motional Series Resistance	Units
13560 to 15999kHz	300 max.	ohm
16000 to 19999kHz	150 max.	
20000 to 39999kHz	100 max.	
40000 to 60000kHz	50 max.	

### Table2 Level of Drive

Frequency Range	Drive Level	Units
13560 to 60000kHz	10 (100 max.)	$\mu W$

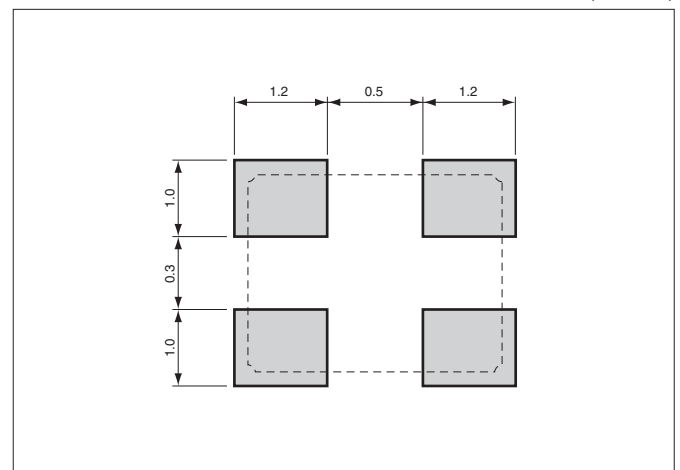
### Dimensions

(Unit: mm)



### Recommended Land Pattern

(Unit: mm)



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Crystals](#) category:*

*Click to view products by [Kyocera AVX](#) manufacturer:*

Other Similar products are found below :

[MC405 32.0000K-R3:PURE SN](#) [7A-40.000MAAE-T](#) [7B-27.000MBBK-T](#) [MP1-8.0 99-BU](#) [9B-15.360MBBK-B](#) [PTX-A2JM-10.000M](#) [9C-7.680MBBK-T](#) [H10S-12.000-18-EXT-TR](#) [R38-32.768-12.5-5PPM-NPB](#) [BTD1062E05A-513](#) [21U15A-21.4MHZ](#) [RTX-781DF1-S-20.950](#) [LFX TAL066198Cutt](#) [9C-14.31818MBBK-T](#) [A-11.000MHZ-27](#) [SPT2A-.032768B](#) [SPT2A.032768G](#) [SSPT7F-9PF20-R](#) [FX325BS-38.88EEM1201](#) [MP-1-25.000MHZ-3L](#) [MP-1-6.000MHZ](#) [LFX TAL065253Cutt](#) [LFX TAL066431Cutt](#) [XT9S20ANA14M7456](#) [XT9SNLANA16M](#) [646G-24-2](#) [7A-24.576MBBK-T](#) [7B-30.000MBBK-T](#) [7A-14.31818MBBK-T](#) [6526-202-1501](#) [BTJ120E02C](#) [SG636PCE-20.000MC](#) [3404](#) [CM315D32768EZFT](#) [C1E-24.000-7-2020-R](#) [C1E-19.200-12-1530-X-R](#) [C1E-16.000-12-1530-X-R](#) [ABM11-16.000MHZ-9-B1U-T](#) [FL5000014](#) [EUCA18-3.1872M](#) [425F35E027M0000](#) [17196](#) [ABM3-13.52313MHZ-10-B4Y-T](#) [MS3V-T1R-32.768kHz-7pF-20PPM-TA-QC-Au](#) [VXM7-1C1-16M000](#) [MS1V-T1K-32.768kHz-10pF-20PPM-TA-QC-Au](#) [MS3V-T1R-32.768kHz-9pF-20PPM-TA-QC-Au](#) [ECS-80-18-30-JGN-TR](#) [17000](#)