

RoHS Compliant

Features

- Crystal unit for Consumer Products
- Ultra-miniature and low profile (2.0x1.6x0.40/ 0.45mm)
- Ceramic package
- A lead free product
- Reflow compatible

Applications

- Digital Electronics
- Consumer Products

How to Order

CX2016DB 27000

① ② ③ ④ ⑤ ⑥ ⑦

① Series (CX2016DB/ CX2016SB)

② Frequency

③ Load Capacitance ④ Frequency Stability

B0	6 pF	—	G	$\pm 15 \times 10^{-6}$	Std.
D0	8 pF	Std.			

⑤ Operating Temp. Range ⑥ Frequency Temp. Stability

EJ	-10 to +70°C	$\pm 15 \times 10^{-6}$	Std.
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⑦ Individual Specification

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

Specifications

Item	Symbol	Specification	Units	Remarks
Series	—	CX2016SB CX2016DB	—	
Frequency Range	f _{nom}	18000 to 23999 24000 to 60000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	8	pF	
Frequency Stability	f _{tol}	± 15	$\times 10^{-6}$	25°C $\pm 3^\circ\text{C}$
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	Table 2	μW	
Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	
Frequency Temp. Characteristics	f _{tem}	± 15	$\times 10^{-6}$	Freq. deviation from the value at 25°C

• Please contact us for other specifications.

Typical Frequencies and Part Numbers

Frequency (kHz)	Part Number
18000.000	CX2016SB18000D0GEJZ1
20000.000	CX2016SB20000D0GEJZ1
24000.000	CX2016DB24000D0GEJZ1
24576.000	CX2016DB24576D0GEJZ1
26000.000	CX2016DB26000D0GEJZ1
27000.000	CX2016DB27000D0GEJZ1
32000.000	CX2016DB32000D0GEJZ1
36000.000	CX2016DB36000D0GEJZ1
37400.000	CX2016DB37400D0GEJZ1
38400.000	CX2016DB38400D0GEJZ1
40000.000	CX2016DB40000D0GEJZ1
48000.000	CX2016DB48000D0GEJZ1

Table1 Motional Series Resistance

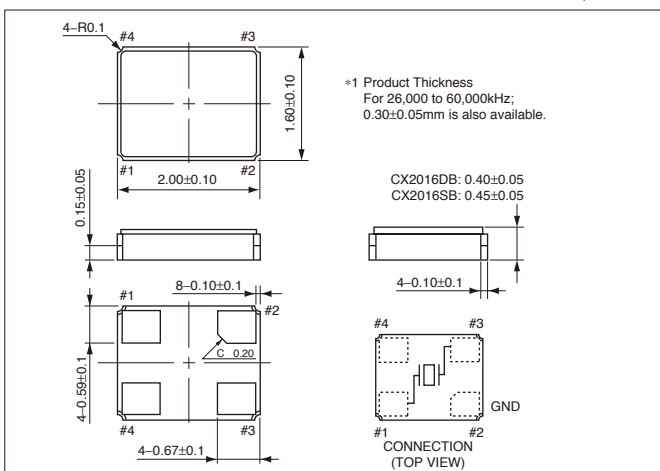
Frequency Range	Motional Series Resistance
18000 to 25999kHz	150Ω max.
26000 to 35999kHz	80Ω max.
36000 to 39999kHz	60Ω max.
40000 to 60000kHz	50Ω max.

Table2 Level of Drive

Frequency Range	Level of Drive
18000 to 60000kHz	10μW (100μW max.)

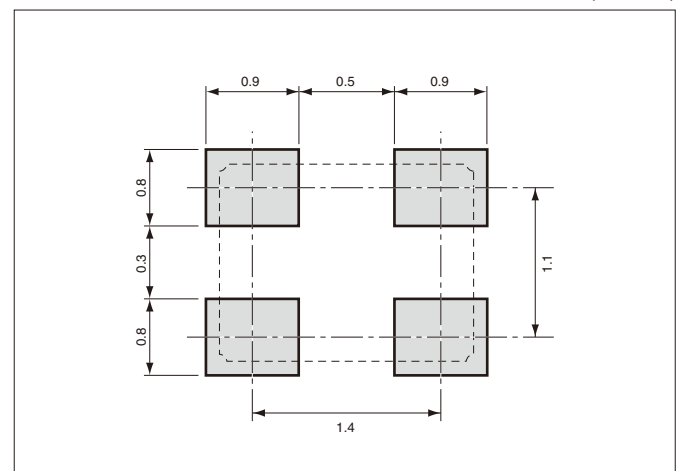
Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)





RoHS Compliant

Features

- Crystal unit for Consumer Products
- Ceramic package
- A lead free product
- Reflow compatible

Applications

- Digital Electronics
- Consumer Products

How to Order

CX2520DB 27000

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series (CX2520DB/ CX2520SB)
 - ② Frequency
 - ③ Load Capacitance ④ Frequency Stability
- | | | | | | |
|-----------|------|------|----------|----------------------|------|
| B0 | 6 pF | — | G | ±15×10 ⁻⁶ | Std. |
| D0 | 8 pF | Std. | | | |
- ⑤ Operating Temp. Range ⑥ Frequency Temp. Stability
- | | | | |
|-----------|--------------|----------------------|------|
| EJ | -10 to +70°C | ±15×10 ⁻⁶ | Std. |
|-----------|--------------|----------------------|------|
- ⑦ Individual Specification

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

Specifications

Item	Symbol	Specification	Units	Remarks
Series	—	CX2520SB CX2520DB	—	
Frequency Range	f _{nom}	13560 to 15999 16000 to 60000	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	8	pF	
Frequency Stability	f _{tol}	±15	×10 ⁻⁶	25°C±3°C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	Table 2	μW	
Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	
Frequency Temp. Characteristics	f _{tem}	±15	×10 ⁻⁶	Freq. deviation from the value at 25°C

• Please contact us for other specifications.

Typical Frequencies and Part Numbers

Frequency (kHz)	Part Number
13560.000	CX2520SB13560D0GEJZ1
16000.000	CX2520DB16000D0GEJZ1
19200.000	CX2520DB19200D0GEJZ1
24000.000	CX2520DB24000D0GEJZ1
24576.000	CX2520DB24576D0GEJZ1
26000.000	CX2520DB26000D0GEJZ1
27120.000	CX2520DB27120D0GEJZ1
30000.000	CX2520DB30000D0GEJZ1
32000.000	CX2520DB32000D0GEJZ1
37400.000	CX2520DB37400D0GEJZ1
38400.000	CX2520DB38400D0GEJZ1
40000.000	CX2520DB40000D0GEJZ1
48000.000	CX2520DB48000D0GEJZ1

Table1 Motional Series Resistance

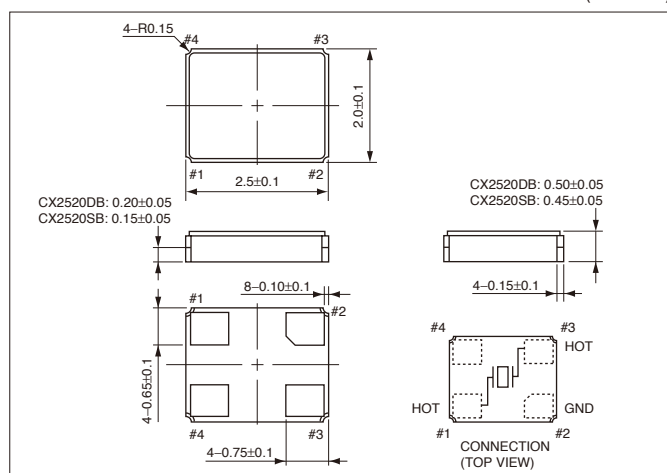
Frequency Range	Motional Series Resistance
13560 to 15999kHz	200Ω max.
16000 to 19199kHz	100Ω max.
19200 to 25999kHz	80Ω max.
26000 to 29999kHz	60Ω max.
30000 to 60000kHz	50Ω max.

Table2 Level of Drive

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

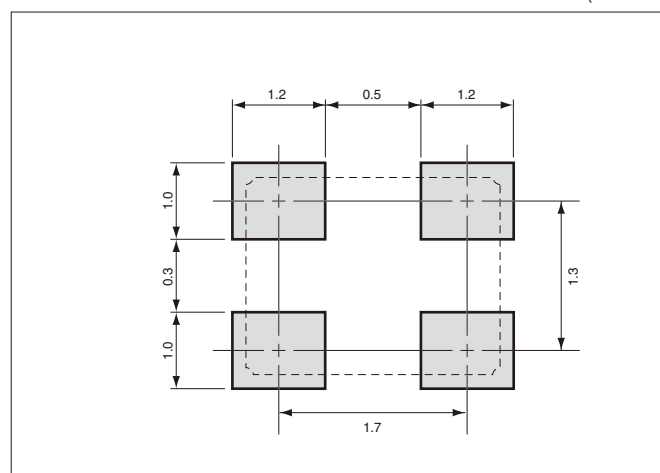
Dimensions

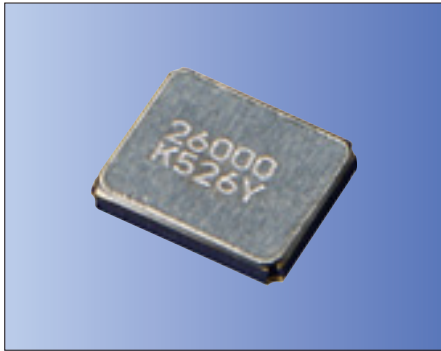
(Unit: mm)



Recommended Land Pattern

(Unit: mm)





RoHS Compliant

Features

- Reference frequency for telecommunication systems
- Reflow compatible
- Using ceramic package resulting in high reliability

Applications

- Mobile Communications, Bluetooth®, Wireless LAN

* Bluetooth® Trademarks are owned by Bluetooth SIG Inc.

How to Order

CX2520DB 26000

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series (CX2520DB/ CX2520SB)
 - ② Frequency
 - ③ Load Capacitance ④ Frequency Stability
- | | | | | | |
|-----------|------|------|----------|-------------------------|------|
| B0 | 6 pF | — | F | $\pm 10 \times 10^{-6}$ | Std. |
| D0 | 8 pF | Std. | G | $\pm 15 \times 10^{-6}$ | — |
- ⑤ Operating Temp. Range ⑥ Frequency Temp. Stability
- | | | | |
|-----------|--------------|-------------------------|------|
| FF | -20 to +70°C | $\pm 10 \times 10^{-6}$ | — |
| LJ | -30 to +85°C | $\pm 15 \times 10^{-6}$ | Std. |
- ⑦ Individual Specification

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

Specifications

Item	Symbol	Specification		Units	Remarks
Series	—	CX2520SB	CX2520DB	—	
Frequency Range	f _{nom}	13560 to 15999	16000 to 60000	kHz	
Overtone Order	OT	Fundamental		—	
Load Capacitance	CL	8		pF	
Frequency Stability	f _{tol}	±10		$\times 10^{-6}$	25°C±3°C
Motional Series Resistance	R1	Table 1		ohm	
Drive Level	DL	Table 2		μW	
Operating Temp. Range	T _{use}	-30 to +85		°C	
Storage Temp. Range	T _{stg}	-40 to +85		°C	
Frequency Temp. Characteristics	f _{tem}	±15		$\times 10^{-6}$	Freq. deviation from the value at 25°C

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Typical Frequencies and Part Numbers

Frequency (kHz)	Part Number
13560.000	CX2520SB13560D0FLJZ1
16000.000	CX2520DB16000D0FLJZ1
19200.000	CX2520DB19200D0FLJZ1
24000.000	CX2520DB24000D0FLJZ1
24576.000	CX2520DB24576D0FLJZ1
26000.000	CX2520DB26000D0FLJZ1
27120.000	CX2520DB27120D0FLJZ1
30000.000	CX2520DB30000D0FLJZ1
32000.000	CX2520DB32000D0FLJZ1
37400.000	CX2520DB37400D0FLJZ1
38400.000	CX2520DB38400D0FLJZ1
40000.000	CX2520DB40000D0FLJZ1
48000.000	CX2520DB48000D0FLJZ1

Table1 Motional Series Resistance

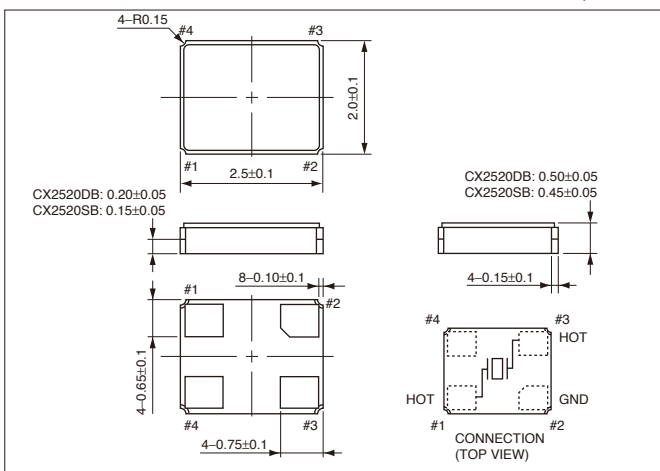
Frequency Range	Motional Series Resistance
13560 to 15999kHz	200Ω max.
16000 to 19199kHz	100Ω max.
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Table2 Level of Drive

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

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

