



Crystal Units

Surface Mount Type CX2520SB (CX-2520SB)

2.5×2.0mm for Audio & Visual, Office Equipment



Pb Free

RoHS Compliant

Features

- Crystal unit for audio-visual, office equipment
- Ultra-miniature and low profile (2.5x2.0x0.45mm)
- Ceramic package
- A lead free product
- Reflow compatible

Applications

- Digital Electronics
- Audio-Visual, Office Equipment

How to Order

CX2520SB 27000 D0 P E S ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
13560	13560.000	30000	30000.000
16000	16000.000	32000	32000.000
18000	18000.000	33000	33000.000
20000	20000.000	33333	33333.000
24000	24000.000	40000	40000.000
26000	26000.000	48000	48000.000
27000	27000.000	54000	54000.000
27120	27120.000		

*Please inquire about frequencies other than the above.

③ Load Capacitance

D0	8pF
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④ Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤ Operating Temperature Range

E	-10°C to +70°C
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⑥ Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	13560 to 60000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±50	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±50	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	8	pF	
Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

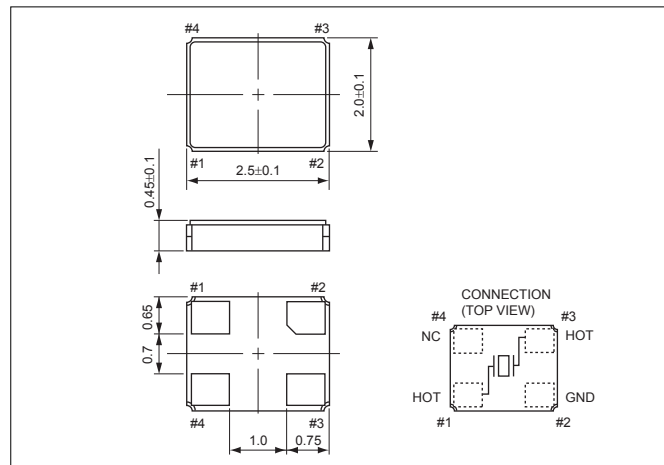
Frequency Range	Motional Series Resistance	Units
13560 to 15999kHz	300	ohm
16000 to 19999kHz	150	
20000 to 39999kHz	100	
40000 to 60000kHz	50	

Table2 Level of Drive

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

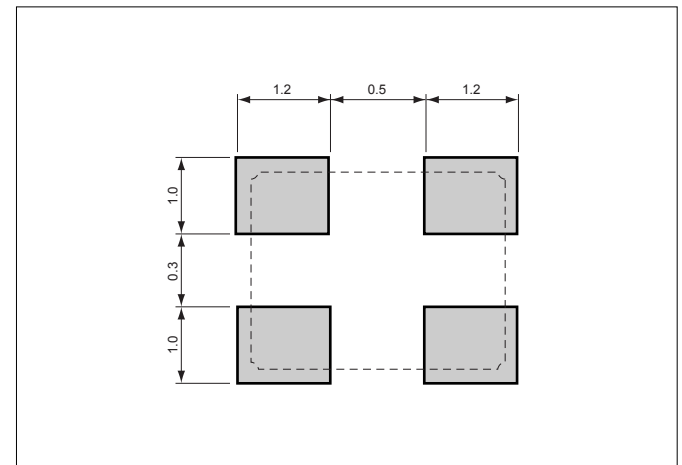
Dimensions

(Unit : mm)



Recommended Land Pattern

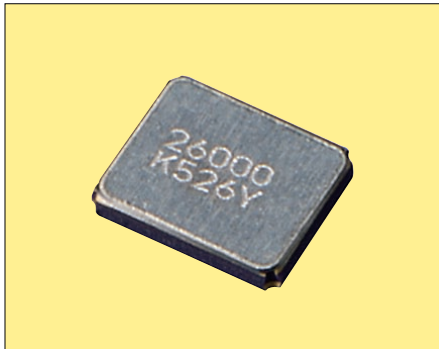
(Unit : mm)





Crystal Units Surface Mount Type CX2520SB (CX-2520SB)

2.5×2.0mm for Mobile Communications, SRWI



Pb 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 32000 D0 F L J ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
13560	13560.000	27120	27120.000
16000	16000.000	32000	32000.000
18000	18000.000	38400	38400.000
19200	19200.000	40000	40000.000
24000	24000.000	44000	44000.000
26000	26000.000		

*Please inquire about frequencies other than the above.

③ Load Capacitance

D0	8pF
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④ Frequency Stability

F	$\pm 10 \times 10^{-6}$
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⑤ Operating Temperature Range

L	-30°C to +85°C
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⑥ Frequency Temperature Stability

J	$\pm 15 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	13560 to 60000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±10	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±15	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	8	pF	
Operating Temp. Range	T _{use}	-30 to +85	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

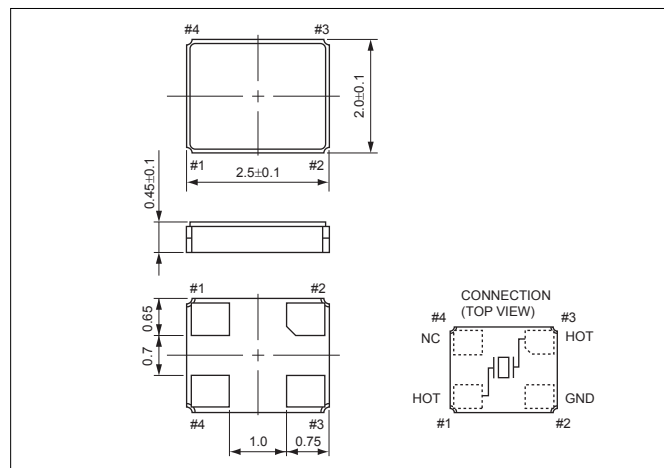
Frequency Range	Motional Series Resistance	Units
13560 to 15999kHz	300	ohm
16000 to 19999kHz	150	
20000 to 39999kHz	100	
40000 to 60000kHz	50	

Table2 Level of Drive

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

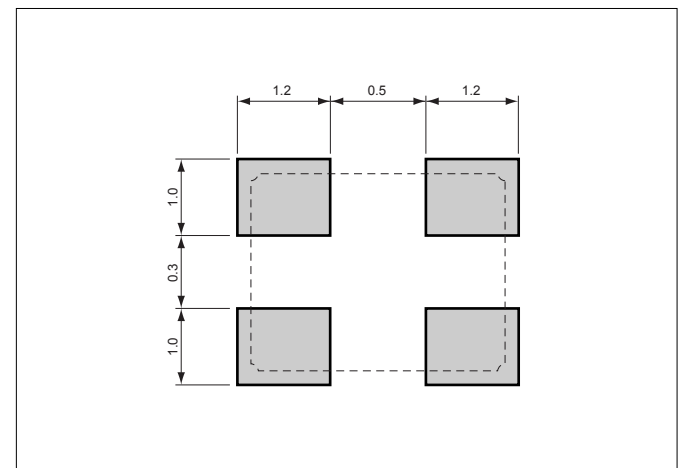
Dimensions

(Unit : mm)



Recommended Land Pattern

(Unit : mm)





Crystal Units

Surface Mount Type CX3225SB (CX-101F)

3.2×2.5mm for Audio & Visual, Office Equipment



Pb Free

RoHS Compliant

Features

- Crystal unit for audio-visual, office equipment
- Miniature and low profile (3.2x2.5x0.55mm)
- Ceramic package
- A lead free product
- Reflow compatible

Applications

- Digital Electronics
- Audio-Visual, Office Equipment

How to Order

CX3225SB 24000 D0 P E S ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
12000	12000.000	25000	25000.000
13560	13560.000	26000	26000.000
14318	14318.180	27000	27000.000
14745	14745.600	27120	27120.000
16000	16000.000	30000	30000.000
18432	18432.000	33000	33000.000
20000	20000.000	33333	33333.000
22579	22579.000	40000	40000.000
24000	24000.000	48000	48000.000
24576	24576.000	54000	54000.000

*Please inquire about frequencies other than the above.

③ Load Capacitance

D0	8pF
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④ Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤ Operating Temperature Range

E	-10°C to +70°C
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⑥ Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	12000 to 54000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±50	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±50	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	8	pF	
Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

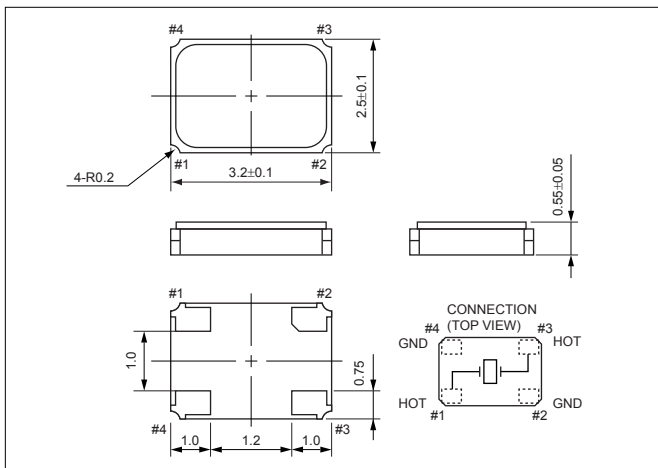
Frequency Range	Motional Series Resistance	Units
12000 to 13999kHz	300	ohm
14000 to 15999kHz	200	
16000 to 26999kHz	100	
27000 to 54000kHz	50	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
12000 to 54000kHz	10 (100 max.)	μW

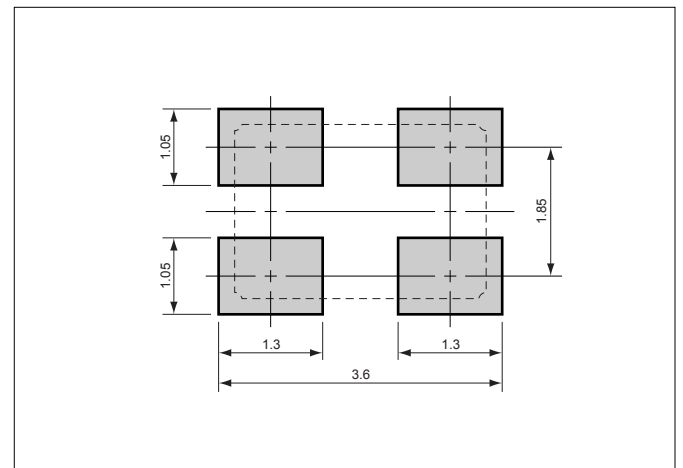
Dimensions

(Unit : mm)



Recommended Land Pattern

(Unit : mm)





Pb 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

CX3225SB 26000 D0 F L J ZZ
 ① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
12000	12000.000	20000	20000.000
13000	13000.000	26000	26000.000
13560	13560.000	32000	32000.000
16000	16000.000	38400	38400.000
19200	19200.000	40000	40000.000

*Please inquire about frequencies other than the above.

③ Load Capacitance

D0	8pF
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④ Frequency Stability

F	$\pm 10 \times 10^{-6}$
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⑤ Operating Temperature Range

L	-30°C to +85°C
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⑥ Frequency Temperature Stability

J	$\pm 15 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	12000 to 54000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±10	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±15	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	8	pF	
Operating Temp. Range	T _{use}	-30 to +85	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

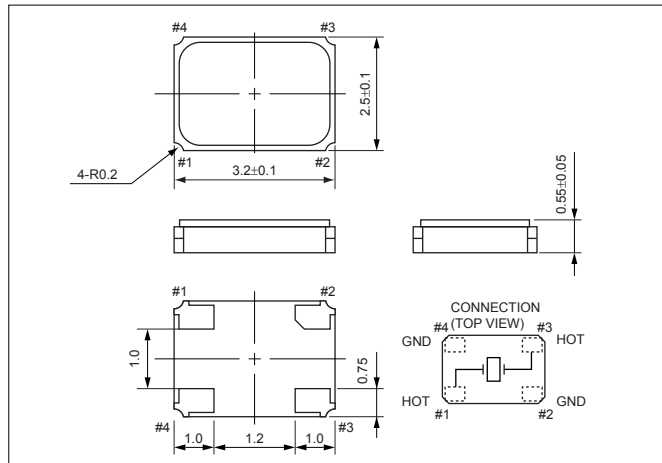
Frequency Range	Motional Series Resistance	Units
12000 to 13999kHz	300	ohm
14000 to 15999kHz	200	
16000 to 26999kHz	100	
27000 to 54000kHz	50	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
12000 to 54000kHz	10 (100 max.)	μW

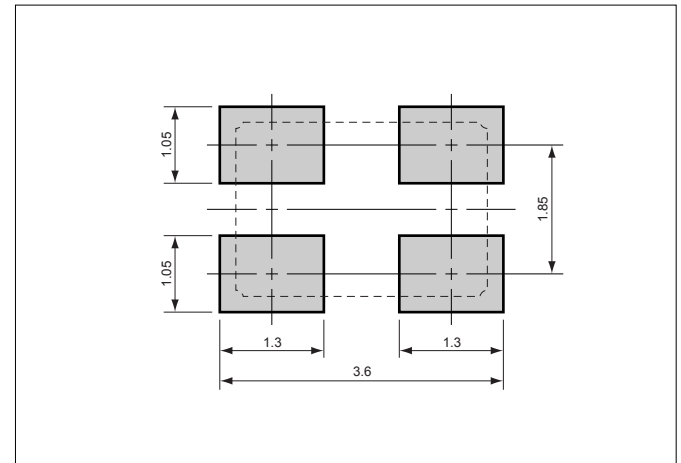
Dimensions

(Unit : mm)



Recommended Land Pattern

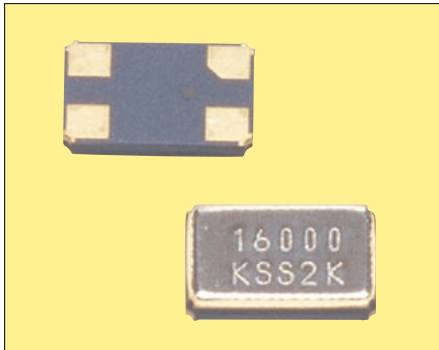
(Unit : mm)





Crystal Units Surface Mount Type CX4025SB (CX-4025S)

4.0×2.5mm for Mobile Communications, SRWI



Pb 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

CX4025SB 26000 F0 F L J ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
12000	12000.000	26000	26000.000
13000	13000.000	32000	32000.000
16000	16000.000	40000	40000.000
20000	20000.000		

*Please inquire about frequencies other than the above.

③ Load Capacitance

F0	10pF
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④ Frequency Stability

F	$\pm 10 \times 10^{-6}$
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⑤ Operating Temperature Range

L	-30°C to +85°C
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⑥ Frequency Temperature Stability

J	$\pm 15 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	12000 to 40000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±10	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±15	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	10	pF	
Operating Temp. Range	T _{use}	-30 to +85	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

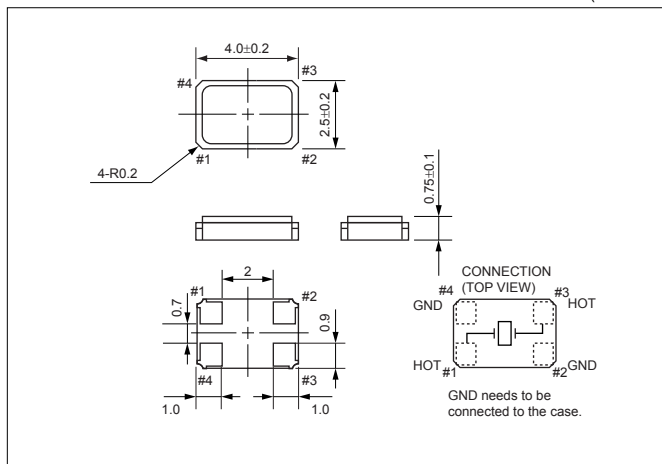
Frequency Range	Motional Series Resistance	Units
12000 to 19999kHz	80	ohm
20000 to 40000kHz	50	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
12000 to 40000kHz	10 (100 max.)	μW

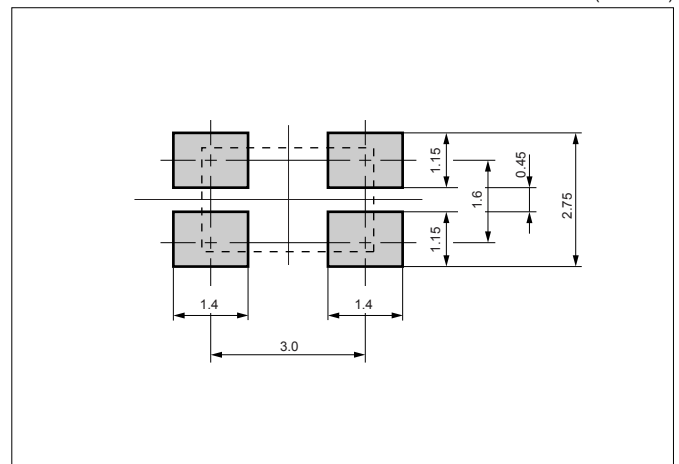
Dimensions

(Unit : mm)



Recommended Land Pattern

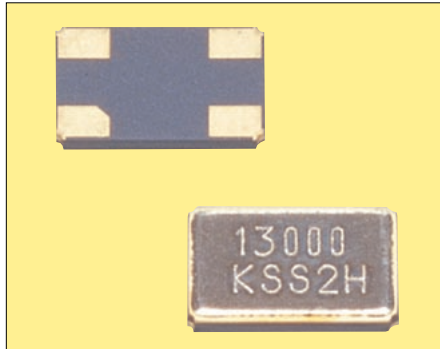
(Unit : mm)





Crystal Units Surface Mount Type CX5032SB (CX-96F)

5.0×3.2mm for Mobile Communications, SRWI



Pb 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

CX5032SB 26000 F0 F L J ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
12000	12000.000	19200	19200.000
12800	12800.000	26000	26000.000
13000	13000.000	32000	32000.000
14400	14400.000	40000	40000.000
16000	16000.000	48000	48000.000

*Please inquire about frequencies other than the above.

③ Load Capacitance

F0	10pF
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④ Frequency Stability

F	$\pm 10 \times 10^{-6}$
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⑤ Operating Temperature Range

L	-30°C to +85°C
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⑥ Frequency Temperature Stability

J	$\pm 15 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	9843.75 to 49999	50 to 120(MHz)	kHz
Overtone Order	OT	Fundamental	3rd Overtone	—
Frequency Tolerance	f _{tol}	±10	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±15	×10 ⁻⁶	ref. @ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	10	pF	
Operating Temp. Range	T _{use}	-30 to +85	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

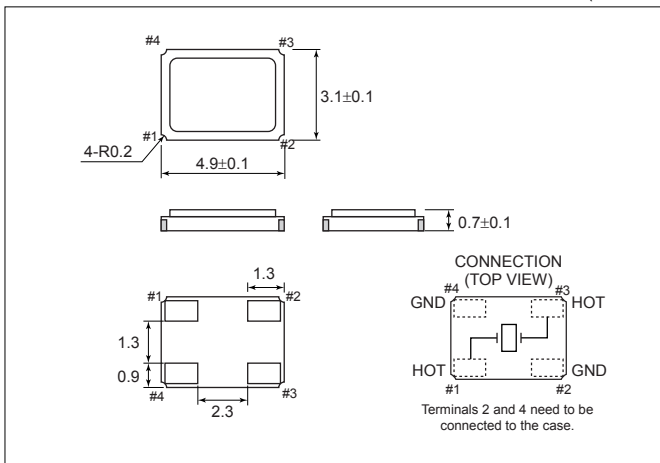
Frequency Range	Motional Series Resistance	Units
9843.75 to 9999kHz	150	ohm
10000 to 11999kHz	80	
12000 to 25999kHz	50	
26000 to 49999kHz	40	
50 to 120(MHz)	80	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
9843.75 to 49999kHz	10 (100 max.)	μW
50 to 120(MHz)(3rdO.T)	10 (100 max.)	

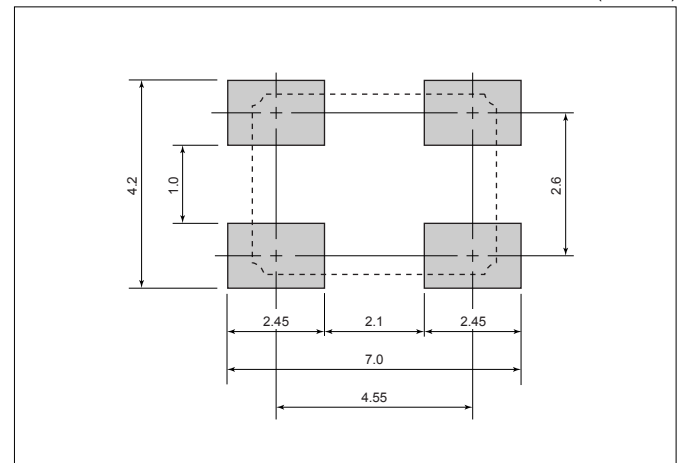
Dimensions

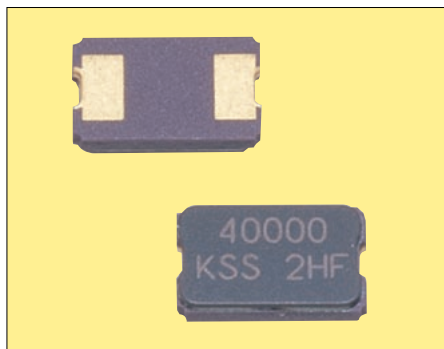
(Unit : mm)



Recommended Land Pattern

(Unit : mm)





RoHS Compliant

Features

- Crystal unit for audio-visual, office equipment
- Small and low profile (5.0×3.2×1.0mm)
- Ceramic package
- Product with lead free terminations
- Reflow compatible

Applications

- Digital Electronics
- Audio-Visual, Office Equipment

How to Order

CX5032GB 48000 H0 P E S ZZ
 ① ② ③ ④ ⑤ ⑥ ⑦

①Code

②Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
10000	10000.000	24000	24000.000
12000	12000.000	24545	24545.450
14318	14318.180	24576	24576.000
14745	14745.600	27000	27000.000
16934	16934.400	36000	36000.000
18432	18432.000	48000	48000.000
22579	22579.200	54000	54000.000

*Please inquire about frequencies other than the above.

③Load Capacitance

H0	12pF
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④Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤Operating Temperature Range

E	-10°C to +70°C
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⑥Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
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⑦Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	9843.75 to 54000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±50	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±50	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	12	pF	
Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

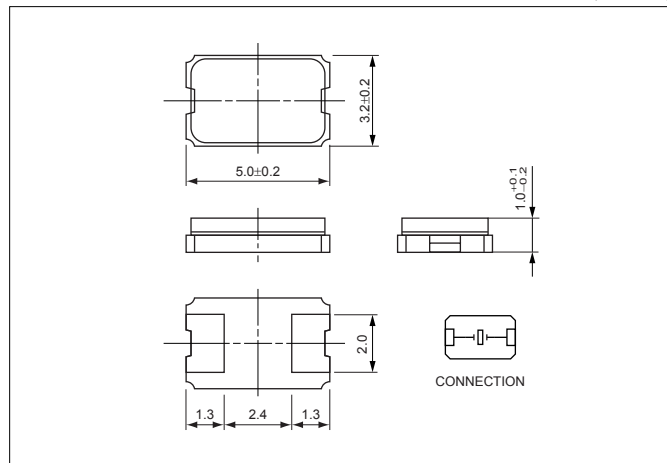
Frequency Range	Motional Series Resistance	Units
9843.75 to 11999kHz	200	ohm
12000 to 13999kHz	150	
14000 to 29999kHz	100	
30000 to 54000kHz	50	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
9843.75 to 15999kHz	10 (500 max.)	μW
16000 to 24999kHz	10 (300 max.)	
25000 to 54000kHz	10 (100 max.)	

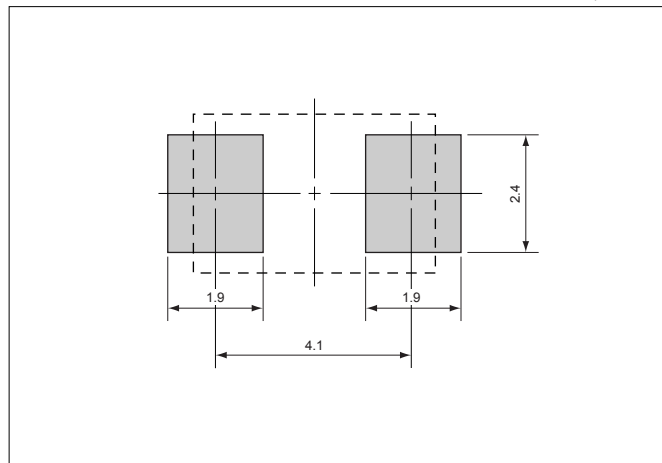
Dimensions

(Unit : mm)



Recommended Land Pattern

(Unit : mm)





Crystal Units

Surface Mount Type CX8045GB (CX-8045G)

8.0×4.5mm for Audio & Visual, Office Equipment



RoHS Compliant

Features

- Crystal unit for audio-visual, office equipment
- Small and low profile (8.0x4.5x1.8mm)
- Ceramic package
- Product with lead free terminations
- Reflow compatible

Applications

- Audio-Visual, Office Equipment

How to Order

CX8045GB 30000 H0 P E S ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
14318	14318.180	24576	24576.000
16000	16000.000	27000	27000.000
16384	16384.000	28636	28636.000
16934	16934.400	30000	30000.000
19660	19660.800	32000	32000.000
20000	20000.000	36000	36000.000
21477	21477.720	40000	40000.000
24000	24000.000		

*Please inquire about frequencies other than the above.

③ Load Capacitance

H0	12pF
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④ Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤ Operating Temperature Range

E	-10°C to +70°C
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⑥ Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	7200 to 48000	kHz	
Overtone Order	OT	Fundamental	—	
Frequency Tolerance	f _{tol}	±50	×10 ⁻⁶	@ 25°C
Frequency Temp. Characteristics	f _{tem}	±50	×10 ⁻⁶	ref.@ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1	ohm	
Level of Drive	DL	Table 2	μW	
Load Capacitance	CL	12	pF	
Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

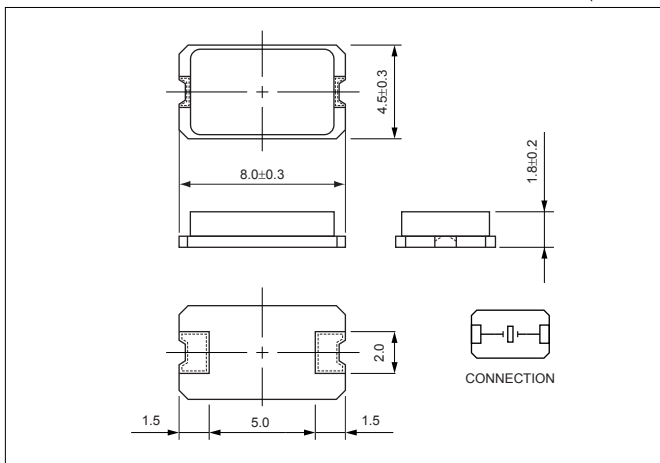
Frequency Range	Motional Series Resistance	Units
7200 to 9999kHz	200	ohm
10000 to 11999kHz	150	
12000 to 48000kHz	50	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
7200 to 9999kHz	10 (500 max.)	μW
16000 to 24999kHz	10 (300 max.)	
25000 to 48000kHz	10 (100 max.)	

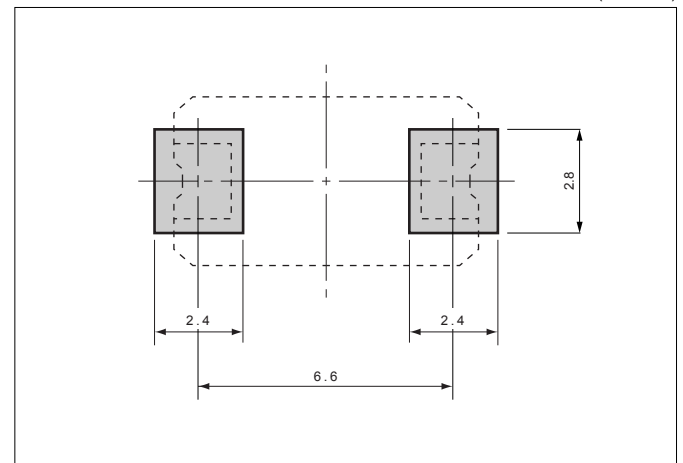
Dimensions

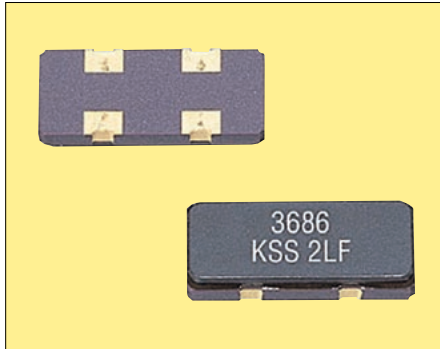
(Unit : mm)



Recommended Land Pattern

(Unit : mm)





RoHS Compliant

Features

- Crystal unit for audio-visual, office equipment
- Small and low profile (11.8x5.5x1.8mm)
- Ceramic package
- Product with lead free terminations
- Reflow compatible

Applications

- Digital Electronics
- Audio-Visual, Office Equipment

How to Order

CXB855GB 03579 H0 P E S ZZ
 ① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
03579	3579.545	14318	14318.180
03686	3686.400	16000	16000.000
04000	4000.000	16934	16934.400
06000	6000.000	19660	19660.800
08000	8000.000	20000	20000.000
12000	12000.000		

*Please inquire about frequencies other than the above.

③ Load Capacitance

H0	12pF
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④ Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤ Operating Temperature Range

E	-10°C to +70°C
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⑥ Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
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Specifications

Items	Symbol	Specification		Units	Remarks
Frequency Range	f _{nom}	3500 to 28999	29 to 60(MHz)	kHz	
Overtone Order	OT	Fundamental	3rd Overtone	—	
Frequency Tolerance	f _{tol}	± 50		$\times 10^{-6}$	@ 25°C
Frequency Temp. Characteristics	f _{tem}	± 50		$\times 10^{-6}$	ref. @ 25°C Over Operating Temp. Range
Motional Series Resistance	R1	Table 1		ohm	
Level of Drive	DL	Table 2		μ W	
Load Capacitance	CL	12		pF	
Operating Temp. Range	T _{use}	-10 to +70		°C	
Storage Temp. Range	T _{stg}	-40 to +85		°C	

* Please inquire about specifications other than the above.

Table1 Motional Series Resistances

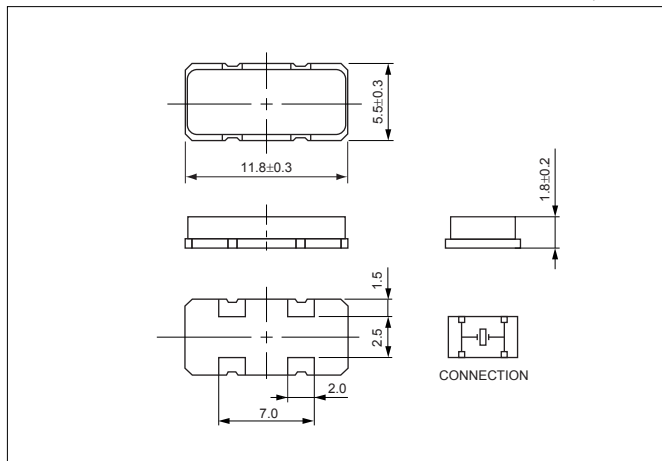
Frequency Range	Motional Series Resistance	Units
3500 to 3999kHz	300	ohm
4000 to 7999kHz	200	
8000 to 11999kHz	120	
12000 to 28999kHz	100	
29 to 60MHz	150	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
3500 to 15999kHz	10 (500 max.)	μ W
16000 to 28999kHz	10 (300 max.)	
29 to 60MHz	10 (300 max.)	

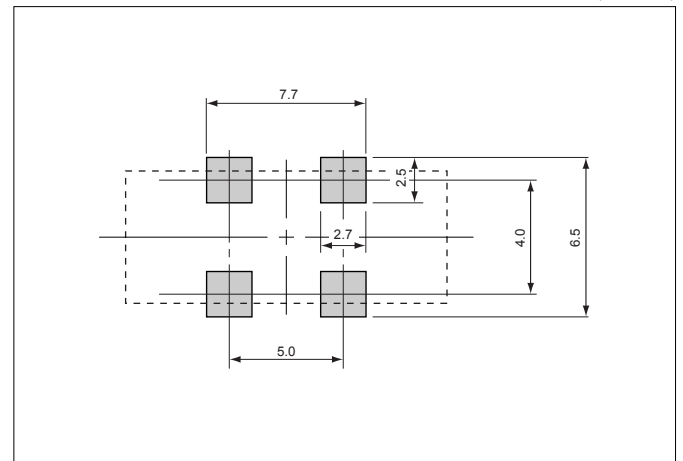
Dimensions

(Unit : mm)



Recommended Land Pattern

(Unit : mm)





Pb Free

RoHS Compliant

Features

- Crystal unit for audio-visual, office equipment
- Metal package, leaded type
- A resistance weld hermetic sealed type
- Suitable for high density assembly and mass production

Applications

- Digital Electronics
- Audio-Visual, Office Equipment

How to Order

CXH49SFB 03579 H0 P E S ZZ
① ② ③ ④ ⑤ ⑥ ⑦

① Code

② Typical Frequencies

Code	Freq.(kHz)	Code	Freq.(kHz)
03200	3200.000	11000	11000.000
03579	3579.545	11059	11059.200
03686	3686.400	12000	12000.000
04000	4000.000	12288	12288.000
04194	4194.304	13500	13500.000
04332	4332.000	14318	14318.180
04433	4433.619	16000	16000.000
04500	4500.000	16934	16934.400
04915	4915.200	17280	17280.000
06000	6000.000	17734	17734.476
06144	6144.000	20000	20000.000
07200	7200.000	21477	21477.270
07372	7372.800	24000	24000.000
08000	8000.000	24576	24576.000
10000	10000.000	25000	25000.000
10240	10240.000	27000	27000.000
10738	10738.635		

*Please inquire about frequencies other than the above.

③ Load Capacitance

H0	12pF
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④ Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤ Operating Temperature Range

E	-10°C to +70°C
----------	----------------

⑥ Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
----------	-------------------------

⑦ Special

ZZ	Custom Specification
-----------	----------------------

Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	3200 to 33999, 30 to 60(MHz)	kHz	
Overtone Order	OT	Fundamental, 3rd Overtone	—	
Frequency Tolerance	f _{tol}	± 50	$\times 10^{-6}$	@ 25°C
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Table1 Motional Series Resistances

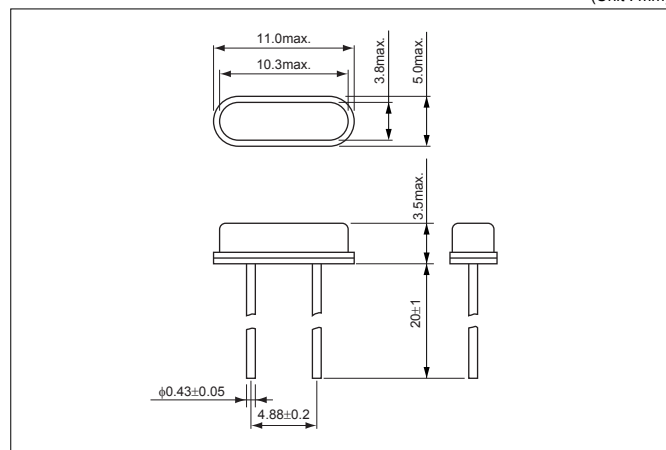
Frequency Range	Motional Series Resistance	Units
3200 to 3499kHz	300	ohm
3500 to 4099kHz	150	
4100 to 4799kHz	120	
4800 to 5999kHz	100	
6000 to 11999kHz	90	
12000 to 13499kHz	70	
13500 to 33999kHz	50	
30 to 60MHz	150	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
3200 to 15999kHz	10 (500 max.)	μW
16000 to 24999kHz	10 (300 max.)	
25000 to 33999kHz	10 (100 max.)	
30 to 60MHz	10 (300 max.)	

Recommended Land Pattern

(Unit : mm)





Pb Free

RoHS Compliant

Features

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How to Order

CXZ49GFB 03579 H0 P E S ZZ
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① Code

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Code	Freq.(kHz)	Code	Freq.(kHz)
03200	3200.000	11000	11000.000
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04000	4000.000	12288	12288.000
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04433	4433.619	16000	16000.000
04500	4500.000	16934	16934.400
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10000	10000.000	25000	25000.000
10240	10240.000	27000	27000.000
10738	10738.635		

*Please inquire about frequencies other than the above.

③ Load Capacitance

H0	12pF
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④ Frequency Stability

P	$\pm 50 \times 10^{-6}$
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⑤ Operating Temperature Range

E	-10°C to +70°C
---	----------------

⑥ Frequency Temperature Stability

S	$\pm 50 \times 10^{-6}$
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⑦ Special

ZZ	Custom Specification
----	----------------------

Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f _{nom}	3200 to 33999, 30 to 60(MHz)	kHz	
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Operating Temp. Range	T _{use}	-10 to +70	°C	
Storage Temp. Range	T _{stg}	-40 to +85	°C	

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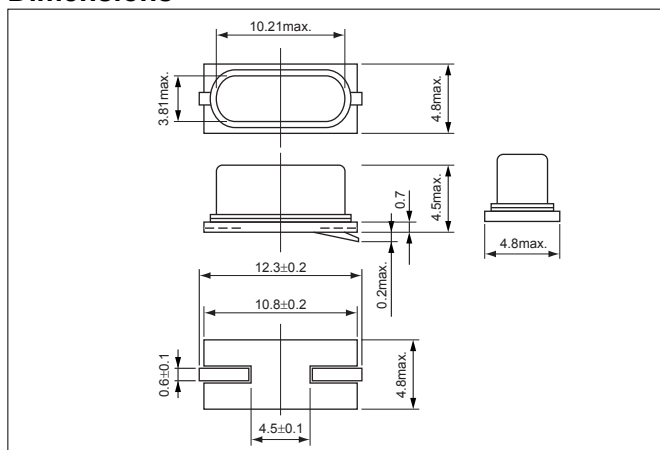
Table1 Motional Series Resistances

Frequency Range	Motional Series Resistance	Units
3200 to 3499kHz	300	ohm
3500 to 4099kHz	150	
4100 to 4799kHz	120	
4800 to 5999kHz	100	
6000 to 11999kHz	90	
12000 to 13499kHz	70	
13500 to 33999kHz	50	
30 to 60MHz	150	

Table2 Level of Drive

Frequency Range	Level of Drive	Units
3200 to 15999kHz	10 (500 max.)	μW
16000 to 24999kHz	10 (300 max.)	
25000 to 33999kHz	10 (100 max.)	
30 to 60MHz	10 (300 max.)	

Dimensions



Recommended Land Pattern

(Unit : mm)

