



**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

<b>H0</b>	12pF
-----------	------

#### ④ Frequency Stability

<b>P</b>	$\pm 50 \times 10^{-6}$
----------	-------------------------

#### ⑤ Operating Temperature Range

<b>E</b>	-10°C to +70°C
----------	----------------

#### ⑥ Frequency Temperature Stability

<b>S</b>	$\pm 50 \times 10^{-6}$
----------	-------------------------

#### ⑦ Special

<b>ZZ</b>	Custom Specification
-----------	----------------------

### Specifications

Items	Symbol	Specification	Units	Remarks
Frequency Range	f <sub>nom</sub>	3200 to 33999, 30 to 60(MHz)	kHz	
Overtone Order	OT	Fundamental, 3rd Overtone	—	
Frequency Tolerance	f <sub>tol</sub>	±50	×10 <sup>-6</sup>	@ 25°C
Frequency Temp. Characteristics	f <sub>tem</sub>	±50	×10 <sup>-6</sup>	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 <sub>use</sub>	-10 to +70	°C	
Storage Temp. Range	T <sub>stg</sub>	-40 to +85	°C	

\* Please inquire about specifications other than the above.

**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)

