



Pb Free

RoHS Compliant

Features

- Crystal unit for automotive electronics
- Metal package, leaded type
- A resistance weld hermetic sealed type
- Suitable for high density assembly and mass production

Applications

- Engine Control

How to Order

CXH49SFA 06000 H0 Q S W ZZ
 ① ② ③ ④ ⑤ ⑥ ⑦

- ① Code
- ② Typical Frequencies

| Code | Freq.(kHz) | Code | Freq.(kHz) |
|-------|------------|-------|------------|
| 04000 | 4000.000 | 12000 | 12000.000 |
| 05000 | 5000.000 | 16000 | 16000.000 |
| 06000 | 6000.000 | 18000 | 18000.000 |
| 08000 | 8000.000 | 20000 | 20000.000 |
| 10000 | 10000.000 | | |

*Please inquire about frequencies other than the above.

- ③ Load Capacitance

| | |
|-----------|------|
| H0 | 12pF |
|-----------|------|

- ④ Frequency Stability

| | |
|----------|-----------------------|
| Q | ±100×10 ⁻⁶ |
|----------|-----------------------|

- ⑤ Operating Temperature Range

| | |
|----------|-----------------|
| S | -40°C to +125°C |
|----------|-----------------|

- ⑥ Frequency Temperature Stability

| | |
|----------|-----------------------|
| W | ±200×10 ⁻⁶ |
|----------|-----------------------|

- ⑦ Special

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

Specifications

| Items | Symbol | Specification | Units | Remarks |
|---------------------------------|------------------|---------------|-------------------|---------------------------------------|
| Frequency Range | f _{nom} | 3200 to 20000 | kHz | |
| Overtone Order | OT | Fundamental | — | |
| Frequency Tolerance | f _{tol} | ±100 | ×10 ⁻⁶ | @ 25°C |
| Frequency Temp. Characteristics | f _{tem} | ±200 | ×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} | -40 to +125 | °C | |
| Storage Temp. Range | T _{stg} | -40 to +125 | °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 20000kHz | 50 | |

Table2 Level of Drive

| Frequency Range | Level of Drive | Units |
|-------------------|----------------|-------|
| 3200 to 15999kHz | 10 (500 max.) | μW |
| 16000 to 20000kHz | 10 (300 max.) | |

Dimensions

(Unit : mm)

