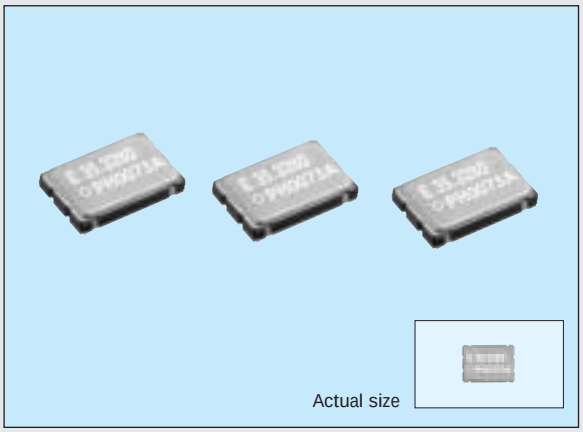
HIGH-STABILITY HIGH-FREQUENCY OSCILLATOR

HG-2150CA

Products number (please refer to page 2)

Q3514CA0xxxxx00

- Reflowable and high density mounting type SMD.
- Using the heat-resisting AT cut crystal allows almost the same heat resisting performance general purpose SMD IC.
- Using C-MOS IC allows low current consumption.
- Operating supply voltage:5.0 V(SVH/BXH),3.3 V(SVC/BXC)
- Provided with output enable function (OE).



Specifications (characteristics)

Item		Symbol	Specifications		Remarks
			SVH / BXH	SVC / BXC	
Output frequency range		f_0	1.0000 MHz to 60.0000 MHz		60 MHz < fo ≤ 80 MHz : Please contact us for inquiries
Power source voltage	Max. supply voltage	V_{DD}-GND	-0.5 V to +7.0 V		
	Operating voltage	V_{DD}	H : 5.0 V ±0.5 V	C : 3.3 V ±0.3 V	
Temperature range	Storage temperature	T_{STG}	-40 °C to +125 °C		Stored as bare product after unpacking
	Operable temperature	T_{OPR}	V : -20 °C to +70 °C, X : -40 °C to +85 °C		
Frequency stability		$\Delta f/f_0$	S : ±15 × 10^{-6}, B : ±25 × 10^{-6} *		S : -20 °C to +70 °C , B : -40 °C to +85 °C
Current consumption		Iop	30 mA Max.	25 mA Max.	No load condition, OE = V_{DD}
Output disable current		I_{OE}	25 mA Max.	20 mA Max.	OE=GND
Duty		tw/t	45 % to 55 %		1/2 V_{DD} level
High output voltage		V_{OH}	V_{DD} -0.4 V Min.		I_{OH}= -4 mA
Low output voltage		V_{OL}	0.4 V Max.		I_{OL}= 4 mA
Output load condition		C_L	15 pF Max.		CMOS load
Output enable/		V_{IH}	0.7 V_{DD} Min.		OE terminal
disable input voltage		V_{IL}	0.3 V_{DD} Max.		
Output rise time		t_{TLH}	4 ns Max.		20 %→80 % V_{DD} level
Output fall time		t_{THL}	4 ns Max.		80 %→20 % V_{DD} level
Oscillation start up time		tosc	10 ms Max.		Time at minimum operating voltage to be 0 s
Aging		fa	±10 x 10^{-6} Max.		Ta=+25 °C, 10 year

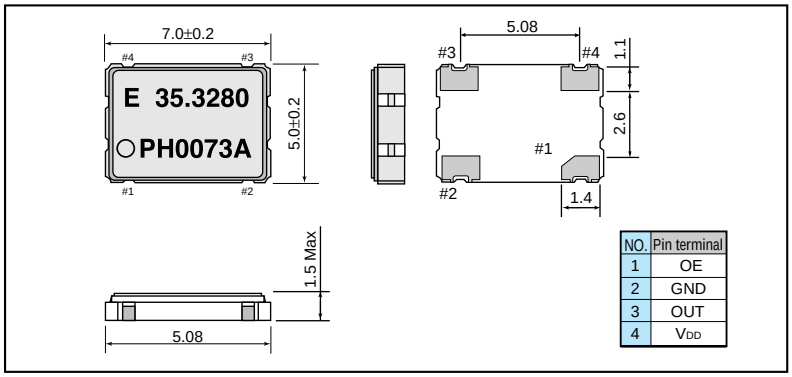
* Frequency stability is including variation in reflow soldering drift, operating temperature range, operating voltage range and load change.

Stability / Temperature range

	Stability	Temperature range
SVH / SVC	±15 × 10^{-6}	-20 °C to +70 °C
BXH / BXC	±25 × 10^{-6}	-40 °C to +85 °C

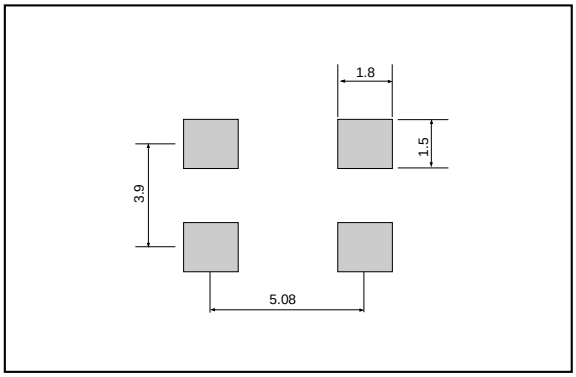
External dimensions

(Unit: mm)



Recommended soldering pattern

(Unit: mm)



Part Numbering System

High Stability Oscillators