



# CRYSTAL OSCILLATOR HIGH-STABILITY

## HG - 2150CA series

- Frequency range : 1 MHz to 60 MHz
- Supply voltage : 3.3 V / 5.0 V
- Frequency tolerance :  $\pm 15 \times 10^{-6}$  / -20 °C to +70 °C
- Function : Output enable(OE)
- External dimensions : 7.0 x 5.0 x 1.4 t (mm) Typ.



Product Number (please contact us)  
Q3514CA00xxxx00



Actual size



### Specifications (characteristics)

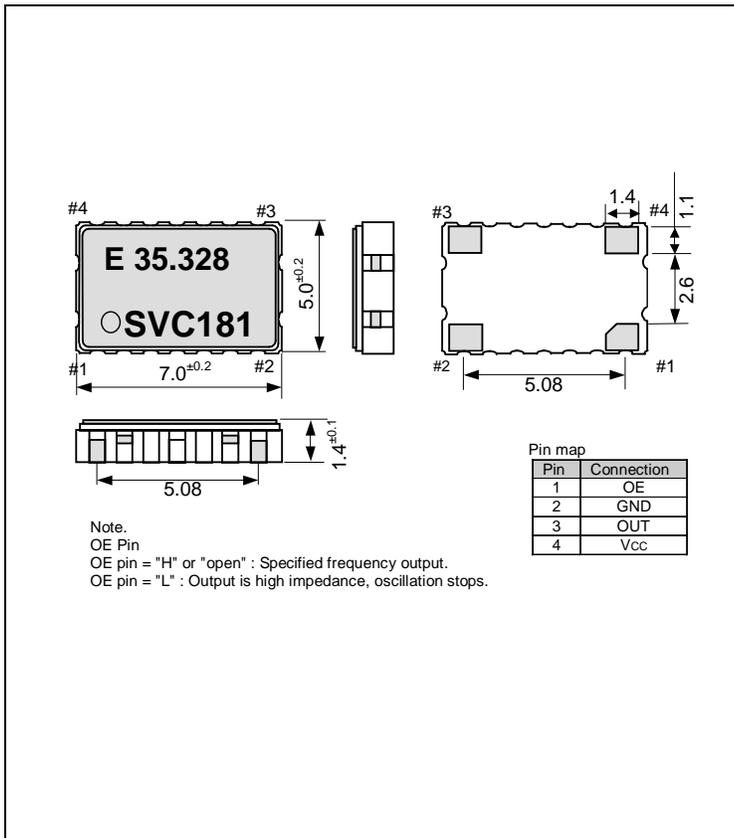
Item	Symbol	Specifications		Remarks
		SVH / BXH	SVC / BXC	
Output frequency range	f <sub>o</sub>	1.000 MHz to 60.000 MHz		
Supply voltage	V <sub>cc</sub>	H:5.0 V ±0.5 V	C:3.3 V ±0.3 V	
Temperature range	Storage temperature	-40 °C to +125 °C		Store as bare product after unpacking
	Operating temperature	V:-20 °C to +70 °C X:-40 °C to +85 °C		
Frequency tolerance	f <sub>tol</sub>	S: $\pm 15 \times 10^{-6}$ *1		-20 °C to +70 °C
		B: $\pm 25 \times 10^{-6}$ *1		-40 °C to +85 °C
Current consumption	I <sub>cc</sub>	30 mA Max.	25 mA Max.	No load condition, OE = V <sub>cc</sub>
Disable current	I <sub>dis</sub>	15 mA Max.	12 mA Max.	OE=GND
Symmetry	SYM	45 % to 55 %		50 % V <sub>cc</sub> level
High output voltage	V <sub>OH</sub>	V <sub>cc</sub> -0.4 V Min.		I <sub>OH</sub> =-4 mA
Low output voltage	V <sub>OL</sub>	0.4 V Max.		I <sub>OL</sub> = 4 mA
Output load condition	L <sub>CMOS</sub>	15 pF Max.		CMOS load
Output enable input voltage	V <sub>IH</sub>	70 % V <sub>cc</sub> Min.		OE terminal
Output disable input voltage	V <sub>IL</sub>	30 % V <sub>cc</sub> Max.		OE terminal
Rise time / Fall time	t <sub>r</sub> / t <sub>f</sub>	4 ns Max.		20 % V <sub>cc</sub> to 80 % V <sub>cc</sub> level
Start-up time	t <sub>str</sub>	10 ms Max.		Time at minimum supply voltage to be 0 s.
Frequency aging	f <sub>aging</sub>	$\pm 10 \times 10^{-6}$ Max. *2		+25 °C, 10 years

\*1 Frequency tolerance includes variation in reflow soldering drift, operating temperature range, supply voltage range and load change.

\*2 50 MHz < f<sub>o</sub> ≤ 60 MHz:  $\pm 15 \times 10^{-6}$  Max.

### External dimensions

(Unit:mm)



### Footprint (Recommended)

(Unit:mm)

