

**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 × 5.0 × 1.4 mm



Product Number (please contact us)  
Q3514CA00xxxx00



Actual size



**Specifications (characteristics)**

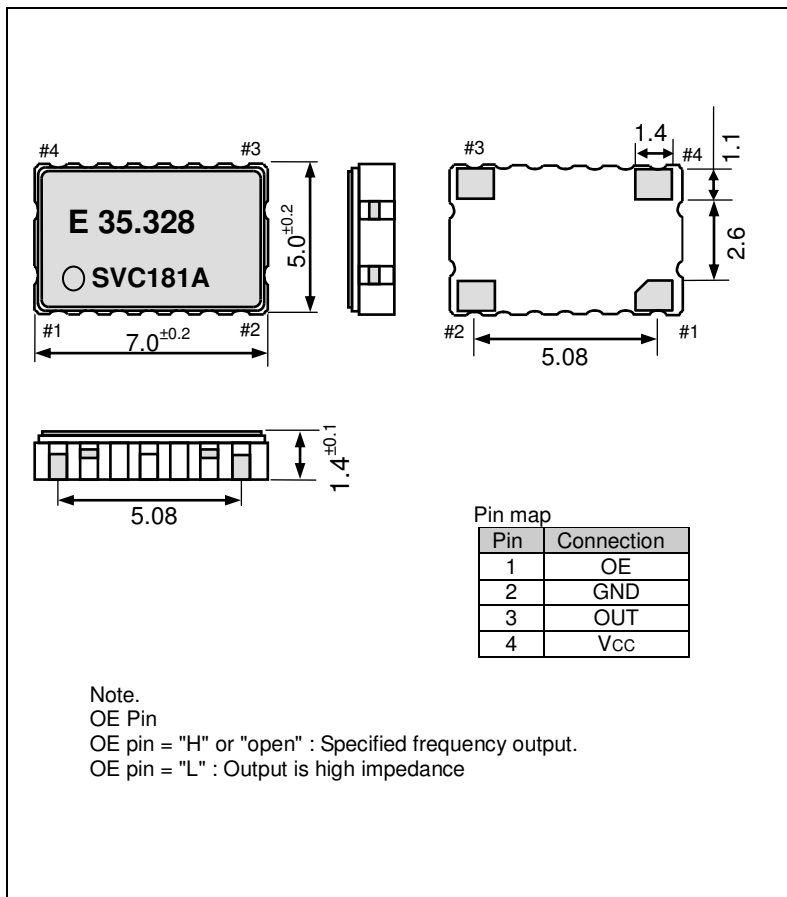
Item	Symbol	Specifications		Conditions / Remarks
		SVH / BXH	SVC / BXC	
Output frequency range	$f_0$	1.000 MHz to 60.000 MHz		
Supply voltage	Vcc	H:5.0 V $\pm 0.5$ V	C:3.3 V $\pm 0.3$ V	
Storage temperature	T_stg	-40 °C to +125 °C		Store as bare product.
Operating temperature	T_use	V:-20 °C to +70 °C X:-40 °C to +85 °C		
Frequency tolerance	f_tol	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	Icc	30 mA Max.	25 mA Max.	No load condition, OE = Vcc
Disable current	I_dis	15 mA Max.	12 mA Max.	OE=GND
Symmetry	SYM	45 % to 55 %		50 % Vcc level
Output voltage	V <sub>OH</sub>	Vcc-0.4 V Min.		I <sub>OH</sub> =-4 mA
	V <sub>OL</sub>	0.4 V Max.		I <sub>OL</sub> = 4 mA
Output load condition	L_CMOS	15 pF Max.		CMOS load
Input voltage	V <sub>IH</sub>	70 % Vcc Min.		OE terminal
	V <sub>IL</sub>	30 % Vcc Max.		
Rise time / Fall time	t <sub>r</sub> / t <sub>f</sub>	4 ns Max.		20 % Vcc to 80 % Vcc level
Start-up time	t_str	10 ms Max.		Time at minimum supply voltage to be 0 s.
Frequency aging	f_aging	$\pm 10 \times 10^{-6}$ 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>0</sub> ≤ 60 MHz:  $\pm 15 \times 10^{-6}$  Max.

**External dimensions**

(Unit:mm)



**Footprint (Recommended)**

(Unit:mm)

