CRYSTAL OSCILLATOR (SPXO)

OUTPUT : CMOS

Product Number
SG5032CCN: X1G004471xxxx00
SG7050CCN: X1G004501xxxx00

SG5032CCN
SG7050CCN

- Frequency range : 2.5 MHz to 50 MHz (Fundamental mode)
- Supply voltage : 5.0 V Typ.
- Function : Output enable (OE)
- Output : CMOS



SG5032CCN
(5.0 × 3.2 × 1.1 mm)



SG7050CCN
(7.0 × 5.0 × 1.3 mm)

Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks
Output frequency range	fo	2.5 MHz to 50 MHz	Please contact us about available frequencies.
Supply voltage	V_{CC}	H: 4.5 V to 5.5 V	
Storage temperature	T_stg	-40 °C to +125 °C	Storage as single product.
Operating temperature	T_use	B: -20 °C to +70 °C, G: -40 °C to +85 °C	
Frequency tolerance	f_tol	J: ±50 × 10^{-6}	-20 °C to +70 °C, -40 °C to +85 °C
Current consumption	I_{CC}	20 mA Max.	No load condition Maximum frequency.
Disable current	I_dis	10 mA Max.	OE = GND
Symmetry	SYM	40 % to 60 %	50 % V_{CC} level, L_CMOS ≤ 50 pF
Output voltage	V_{OH}	V_{CC} - 0.4 V Min.	I_{OH} = -8 mA
	V_{OL}	0.4 V Max.	I_{OL} = 16 mA
Output load condition	L_CMOS	50 pF Max.	
Input voltage	V_{IH}	80 % V_{CC} Min.	OE terminal
	V_{IL}	20 % V_{CC} Max.	
Rise time / Fall time	tr / tf	5 ns Max.	20 % V_{CC} to 80 % V_{CC} level, L_CMOS ≤ 50 pF
Start-up time	tOSC	4 ms Max.	t = 0 at 90 % V_{CC}
Frequency aging	f_age	±5 × 10^{-6} / year Max.	+25 °C, First year.

Product Name (Standard form) SG5032 C CN 25.000000MHz H J G A
① ② ③ ④⑤⑥⑦
①Model ②Output (C: CMOS) ③Frequency
④Supply voltage ⑤Frequency tolerance
⑥Operating temperature range ⑦Internal identification code (“A” is default)

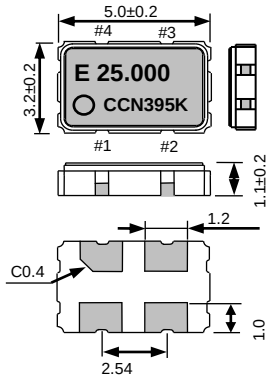
④Supply voltage	
H	5.0 V Typ.

⑤Frequency tolerance	
J	±50 × 10^{-6}

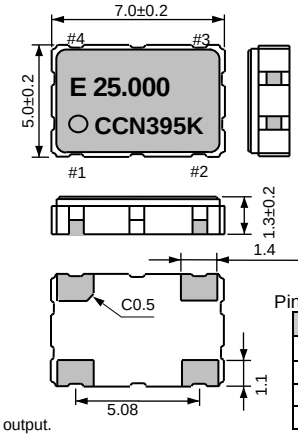
⑥Operating temperature range	
B	-20 °C to +70 °C
G	-40 °C to +85 °C

External dimensions (Unit:mm)

●SG5032 type



●SG7050 type



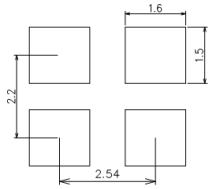
Pin map

Pin	Connection
1	OE
2	GND
3	OUT
4	V_{CC}

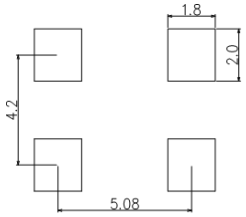
Note.
OE pin = "H" or "open" : Specified frequency output.
OE pin = "L" : Output is high impedance.

Footprint (Recommended) (Unit:mm)

●SG5032 type



●SG7050 type



To maintain stable operation, provide a 0.01 µF to 0.1 µF by-pass capacitor at a location as near as possible to the power source terminal of the crystal product (between V_{CC} - GND).

►Explanation of the mark that are using it for the catalog

	►Pb free.
	►Complies with EU RoHS directive. *About the products without the Pb-free mark. Contains Pb in products exempted by EU RoHS directive. (Contains Pb in sealing glass, high melting temperature type solder or other.)
	►Designed for automotive general equipment.
	►Designed for automotive applications related to driving and safety.

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