

SEIKO EPSON CORPORATION

CRYSTAL OSCILLATOR (SPXO) OUTPUT : CMOS

SC2022CCN



Product Number SG5032CCN: X1G004471xxxx00 SG7050CCN: X1G004501xxxx00



(5.0 × 3.2 × 1.1 mm)



SG7050CCN (7.0 × 5.0 × 1.3 mm)

3630320CN	
SG7050CCN	

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

- ۰F Output
- : CMOS

Item	Symbol	Specifications	Conditions / Remarks
Output frequency range	fo	2.5 MHz to 50 MHz	Please contact us about available frequencie
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 \leq 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	VIH	80 % V _{CC} Min.	OE terminal
	VIL	20 % V _{CC} Max.	OEterminar
Rise time / Fall time	tr / tf	5 ns Max.	20 % V _{CC} to 80 % V _{CC} level, L_CMOS \leq 50 pF
Start-up time	tOSC	4 ms Max.	t = 0 at 90 % V _{CC}
Frequency aging	f_age	$\pm5 imes10^{-6}$ / year Max.	+25 °C, First year.

(Standard form)

2 4567 3

1 Model 2Output (C: CMOS) ③Frequency

(4) Supply voltage (5) Frequency tolerance

6 Operating temperature range ⑦Internal identification code ("A" is default) 5 Frequency tolerance J ±50 × 10⁻⁶

④Supply voltage H 5.0 V Typ.

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

External dimensions (Unit:mm) Footprint (Recommended) (Unit:mm) •SG5032 type •SG7050 type •SG5032 type 7.0±0.2 5.0±0.2 #Δ #3 #4 E 25.000 5.0±0.2 E 25.000 2 5 7 CCN395K O CCN395K #1 #2 ŧ #2 •SG7050 type #1 1±0. Н ŧ 2.0 1.3±0.2 ţ ſΠ Η Нþ 1.4 C0.4 Pi<u>n map</u> C0.5 Pin Connection 1 OE 2.54 GND 2 To maintain stable operation, provide a 0.01 μF to OUT 3 $0.1\ \mu\text{F}$ by-pass capacitor at a location as near as possible to the power source terminal of the crystal Note 5.08 Vc OE pin = "H" or "open" : Specified frequency output. 4 OE pin = "L" : Output is high impedance. product (between Vcc - GND).

PROMOTION OF ENVIRONMENTAL MANAGEMENT SYSTEM CONFORMING TO INTERNATIONAL STANDARDS

At Seiko Epson, all environmental initiatives operate under the Plan-Do-Check-Action (PDCA) cycle designed to achieve continuous improvements. The environmental management system (EMS) operates under the ISO 14001 environmental management standard.

All of our major manufacturing and non-manufacturing sites, in Japan and overseas, completed the acquisition of ISO 14001 certification.

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In order provide high quality and reliable products and services than meet customer needs, Seiko Epson made early efforts towards obtaining ISO9000 series certification and has acquired ISO9001 for all business establishments in Japan and abroad. We have also acquired IATF 16949 certification that is requested strongly by major automotive manufacturers as standard.

Explanation of the mark that are using it for the catalog

ISO 14000 is an international standard for environmental management that was established by the International Standards Organization in 1996 against the background of growing concern regarding global warming, destruction of the ozone layer, and global deforestation.

IATF 16949 is the international standard that added the sector-specific supplemental requirements for automotive industry based on ISO9001.

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