

CRYSTAL OSCILLATOR (SPXO)
OUTPUT : LV-PECL

SG3225 / 7050EEN

- Frequency range : 25 MHz to 325 MHz
- Supply voltage : 2.5 V , 3.3 V
- Output : LV-PECL
- Function : Output enable (OE)
- Phase jitter : 50 fs Typ. (f₀ = 156.25MHz)
- Operating temperature : -40 °C to +85 °C
: -40 °C to +105 °C



Product Number (please contact us)
 SG3225EEN X1G005221xxxxxx(f≤200MHz)
 X1G005511xxxxxx(f>200MHz)
 SG7050EEN X1G005131xxxxxx(f≤200MHz)
 X1G005551xxxxxx(f>200MHz)



Actual size

SG3225EEN

SG7050EEN

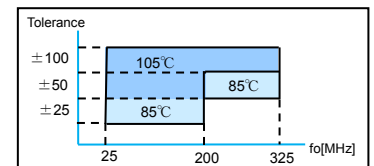
Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks	
Output frequency range	f ₀	25 MHz to 325 MHz	Please contact us for inquiries regarding available frequencies.	
Supply voltage	V _{cc}	D : 2.5 V ±0.125 V , C : 3.3 V ±0.165 V		
Storage temperature	T _{stg}	-55 °C to +125 °C	Store as bare product.	
Operating temperature	T _{use}	G : -40 °C to +85 °C , H : -40 °C to +105 °C		
Frequency tolerance	f _{tol}	D : ±25 × 10 ⁻⁶ Max.	Includes initial tolerance, temperature change, V _{cc} change and 5 years aging(+25 °C)	
See of figure *1		J : ±50 × 10 ⁻⁶ Max.		Includes initial tolerance, temperature change, V _{cc} change and 10 years aging(+25 °C)
		L : ±100 × 10 ⁻⁶ Max.		
Current consumption	I _{cc}	60 mA Max.	OE= V _{cc} , with output load	
Disable current	I _{dis}	25 mA Max.	OE=GND	
Symmetry	SYM	45 % to 55 %	At outputs crossing point	
Output voltage	V _{OH} V _{OL}	V _{cc} -1.1 V Min. V _{cc} -1.5 V Max.	DC characteristics	
Output load condition	L _{ECL}	50 Ω	Terminated to V _{cc} -2.0V	
Input voltage	V _{IH} V _{IL}	70 % V _{cc} Min. 30 % V _{cc} Max.	OE terminal	
Rise/Fall times	Tr / Tf	25 MHz ≤ f ₀ ≤ 200 MHz	200 MHz < f ₀ ≤ 325 MHz	
		300 ps Max.	350 ps Max.	
		350 ps Max.	350 ps Max.	
Oscillation start up time	t _{str}	10 ms Max.	Time at minimum supply voltage to be 0 s	

Phase jitter

	100 MHz	125 MHz	156.25 MHz	200 MHz	312.5 MHz
Phase jitter Typ. [fs] (Offset frequency 12k to 20MHz)	75	60	50	40	30

*1 : Maximum T_{use} of operating range



Product Name **SG3225 EEN 156.250000MHz C D G A**

(Standard form) ① ② ③ ④⑤⑥⑦

①Model ②Output (E: LV-PECL) ③Frequency ④Supply voltage (C: 3.3 V Typ. D: 2.5 V Typ.)

⑤Frequency tolerance (D: ±25 × 10⁻⁶ Max. J: ±50 × 10⁻⁶ Max. L: ±100 × 10⁻⁶ Max.)

⑥Operating temperature (G:-40 to +85°C , H:-40 to +105°C) ⑦Internal identification code("A" is default)

External dimensions

(Unit:mm)

	3225 size	7050 size
a	3.2±0.2	7.0±0.2
b	2.5±0.2	5.0±0.2
c	1.05±0.15	1.5±0.2

Note:
 OE pin = HIGH or "Open" : Specified frequency output.
 OE pin = LOW : Output is high impedance

Footprint (Recommended)

(Unit:mm)

	3225 size	7050 size
A	1.05	2.00
B	0.92	1.80
C	1.85	4.20
D	2.58	5.08
E	0.80	1.80

In order to achieve optimum jitter performance, it is recommended that the capacitor (0.1 μF + 10 μF) between V_{cc} and GND pin be placed as close to the V_{cc} pin as possible.

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.

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.

WORKING FOR HIGH QUALITY

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 ISO/TS 16949 certification that is requested strongly by major automotive manufacturers as standard.

ISO/TS16949 is the international standard that added the sector-specific supplemental requirements for automotive industry based on ISO9001.

► 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 applications such as Car Multimedia, Body Electronics, Remote Keyless Entry etc.
	► Designed for automotive applications related to driving safety (Engine Control Unit, Air Bag, ESC etc).

Notice

- This material is subject to change without notice.
- Any part of this material may not be reproduced or duplicated in any form or any means without the written permission of Seiko Epson.
- The information about applied data, circuitry, software, usage, etc. written in this material is intended for reference only. Seiko Epson does not assume any liability for the occurrence of customer damage or infringing on any patent or copyright of a third party. This material does not authorize the licensing for any patent or intellectual copyrights.
- When exporting the products or technology described in this material, you should comply with the applicable export control laws and regulations and follow the procedures required by such laws and regulations.
- You are requested not to use the products (and any technical information furnished, if any) for the development and/or manufacture of weapon of mass destruction or for other military purposes. You are also requested that you would not make the products available to any third party who may use the products for such prohibited purposes.
- These products are intended for general use in electronic equipment. When using them in specific applications that require extremely high reliability, such as the applications stated below, you must obtain permission from Seiko Epson in advance.
/ Space equipment (artificial satellites, rockets, etc.) / Transportation vehicles and related (automobiles, aircraft, trains, vessels, etc.) / Medical instruments to sustain life / Submarine transmitters / Power stations and related / Fire work equipment and security equipment / traffic control equipment / and others requiring equivalent reliability.
- All brands or product names mentioned herein are trademarks and/or registered trademarks of their respective.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Epson:

[SG3225EEN 100.000000M-CDGA0](#) [SG3225EEN 100.000000M-CDGA3](#) [SG3225EEN 100.000000M-CDGAB](#)
[SG3225EEN 100.000000M-CJGA3](#) [SG3225EEN 100.000000M-CJGAB](#) [SG3225EEN 100.000000M-CLGA3](#)
[SG7050EEN 156.250000M-CDGA3](#) [SG7050EEN 156.250000M-CJGA3](#) [SG3225EEN 25.000000M-CJGA3](#)
[SG3225EEN 25.000000M-CJGAB](#) [SG3225EEN 50.000000M-CDGAX](#) [SG7050EEN 156.2500M-CJGA3](#) [SG7050EEN](#)
[156.2500M-CJGAB](#) [SG7050EEN 50.0000M-CDGAX](#) [SG3225EEN 200.000000M-CDGAB](#) [SG3225EEN 200.000000M-](#)
[CDGAX](#) [SG3225EEN 200.000000M-CLGA3](#) [SG3225EEN 200.000000M-CLGAB](#) [SG3225EEN 25.000000M-CDGA3](#)
[SG3225EEN 25.000000M-CDGAB](#) [SG3225EEN 156.250000M-CLHAB](#) [SG3225EEN 156.250000M-DJGA3](#)
[SG3225EEN 156.250000M-DJGAB](#) [SG3225EEN 166.015625M-CJGAB](#) [SG3225EEN 170.016000M-CJGAB](#)
[SG3225EEN 200.000000M-CDGA3](#) [SG3225EEN 156.250000M-CDGAB](#) [SG3225EEN 156.250000M-CJGA3](#)
[SG3225EEN 156.250000M-CJGAB](#) [SG3225EEN 156.250000M-CJHA3](#) [SG3225EEN 156.250000M-CJHAB](#)
[SG3225EEN 156.250000M-CJHAX](#) [SG3225EEN 100.000000M-CLGAB](#) [SG3225EEN 100.000000M-CLHAX](#)
[SG3225EEN 125.000000M-CJGA3](#) [SG3225EEN 125.003125M-CDGA3](#) [SG3225EEN 125.003125M-CDGAB](#)
[SG3225EEN 156.250000M-CDGA3](#)

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А