



## Oven Controlled Crystal Oscillator (OCXO)

**NEW**

Product Number (Please contact us)  
X1G004661001200

# OG2525CCNHCBDDJ

- Output frequency : 10.0MHz
- Supply voltage : 5.0 V Typ.
- Frequency / temperature characteristics :  $\pm 50 \times 10^{-9}$  Max. / -20 °C to +70 °C
- External dimensions : 25.4 × 25.4 × 12.7 mm
- Features : Very fast warm-up and accurate stability  
: SC-Cut Crystal unit



Please contact us for detailed specifications

### Specifications (characteristics)

Item	Symbol	Specifications	Condition / Remarks	
Output frequency range	fo	10.000 MHz		
Supply voltage	Vcc	H : 5V $\pm 0.25$ V		
Storage temperature range	T_stg	-40 °C to +85 °C		
Operating temperature range	T_use	B : -20 °C to +70 °C		
Frequency tolerance *	Initial tolerance	$\pm 200 \times 10^{-9}$ Max.	at +25 °C, Vcc=5.0V	
	Frequency/temperature characteristics	fo-Tc	D : $\pm 50 \times 10^{-9}$ Max. -20 °C to +70 °C calm air	
	Frequency/voltage coefficient	fo-Vcc	$\pm 5 \times 10^{-9}$ Max. Vcc=5 V $\pm 0.25$ V	
	Frequency/load coefficient	Fo-load	$\pm 5 \times 10^{-9}$ Max. 15pF $\pm 5\%$	
	Frequency aging	f_age	$\pm 3 \times 10^{-9}$ / day Max. C : $\pm 100 \times 10^{-9}$ / year Max. Temp.; at +25 °C calm air Vcont & Vcc = const. ; f ref; 7days after power on	
Warm-up	—	$\pm 50 \times 10^{-9}$ / 5 min Max.	at +25 °C	
Frequency tuning		$\pm 0.2 \times 10^{-6}$ to $\pm 0.8 \times 10^{-6}$	Vcont 0.5 to 4.5V positive slope	
Current consumption	Warm-up	Icc	650 mA Max.	Vcc=5 V
	Steady state		300 mA Max.	Vcc=5 V at +25 °C
Symmetry	SYM	45% to 55%	at 2V	
Output voltage	V <sub>OH</sub> /V <sub>OL</sub>	V <sub>OH</sub> = 2.4V Min. / V <sub>OL</sub> = 0.4V Max.		
Output load condition	Load C	15 pF typ	Max 20pF R-load Min.1kΩ	
Phase noise (10MHz)	1Hz	—	-80 dBc/Hz typ.	
	10Hz		-100 dBc/Hz typ.	
	100Hz		-130 dBc/Hz typ.	
	1kHz		-140 dBc/Hz typ.	
	10kHz		-145 dBc/Hz typ.	

Product name OG2525CCN10.000000MHzHCBDDJ

(Standard form) ① ② ③ ④⑤⑥⑦⑧⑨

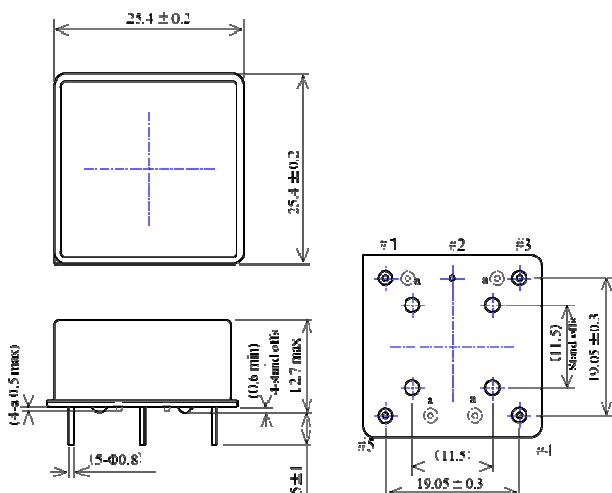
①Model ②Output(C:CMOS) ③Frequency ④Supply voltage(H:5V) ⑤Aging(C:  $\pm 100 \times 10^{-9}$  / year)

⑥Operating temperature(B: -20 °C to +70 °C) ⑦Frequency / temperature characteristics(D:  $\pm 50 \times 10^{-9}$  Max.)

⑧Option(D: Electric Frequency Control) ⑨Internal identification code

### External dimensions

(Unit:mm)



### Pin map

Pin	Connection
#1	Output
#2	GND/Case
#3	Vcont
#4	N.C
#5	Vcc

There should be no patterns under 4a pins(EPSON use), on customer's PCB.

## 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 ).

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