

CRYSTAL OSCILLATOR
SPREAD SPECTRUM
OUTPUT : CMOS



Product Number (please contact us)
 SG-9001LB: Q3331x2x0xxxx00
 SG-9001CA: Q3331x0x0xxxx00
 SG-9001JC: Q3331x1x2xxxx00

SG-9001LB / CA / JC series

- Frequency range : 10 MHz to 166 MHz
- Supply voltage : 3.3 V
- Function : Output enable(OE)
- External dimensions : 5.0 x 3.2 x 1.2 mm...SG-9001LB
 7.0 x 5.0 x 1.4 mm...SG-9001CA
 10.5 x 5.8 x 2.7 mm...SG-9001JC
- Range of spreading percentage is selectable by program (Center or Down spread, 6 Values)



Actual size

SG-9001LB	SG-9001CA	SG-9001JC

Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks
Output frequency range	fo	10.000 MHz to 166.000 MHz	SG-9001JC, CA
		10.000 MHz to 135.000 MHz	SG-9001LB
Supply voltage	Vcc	3.3 V±0.3 V	Please contact us about available frequencies.
Storage temperature	T_stg	-55 °C to +100 °C	SG-9001JC
		-40 °C to +125 °C	SG-9001LB, CA
Operating temperature	T_use	-20 °C to +70 °C	Storage as single product.
Current consumption	Icc	30 mA Max.	No load condition, fo = 166 MHz
Disable current	I_dis	20 mA Max.	OE=GND, fo = 166 MHz
Symmetry	SYM	45 % to 55 %	CMOS load: 50 % Vcc level, L_CMOS=15 pF
Output voltage	Voh	Vcc-0.4 V Min.	Ioh=-8 mA
	Vol	0.4 V Max.	Iol= 8 mA
Output load condition	L_CMOS	15 pF Max.	
Input voltage	Vih	70 % Vcc Min.	OE terminal
	Vil	30 % Vcc Max.	OE terminal
Rise time / Fall time	tr / tf	2.7 ns Max.	20 % Vcc to 80 % Vcc level, L_CMOS=15 pF.
Start-up time	t_str	10 ms Max.	Time at minimum supply voltage to be 0 s
Frequency aging	f_aging	±5 × 10 ⁻⁶ / year Max.	+25 °C, First year

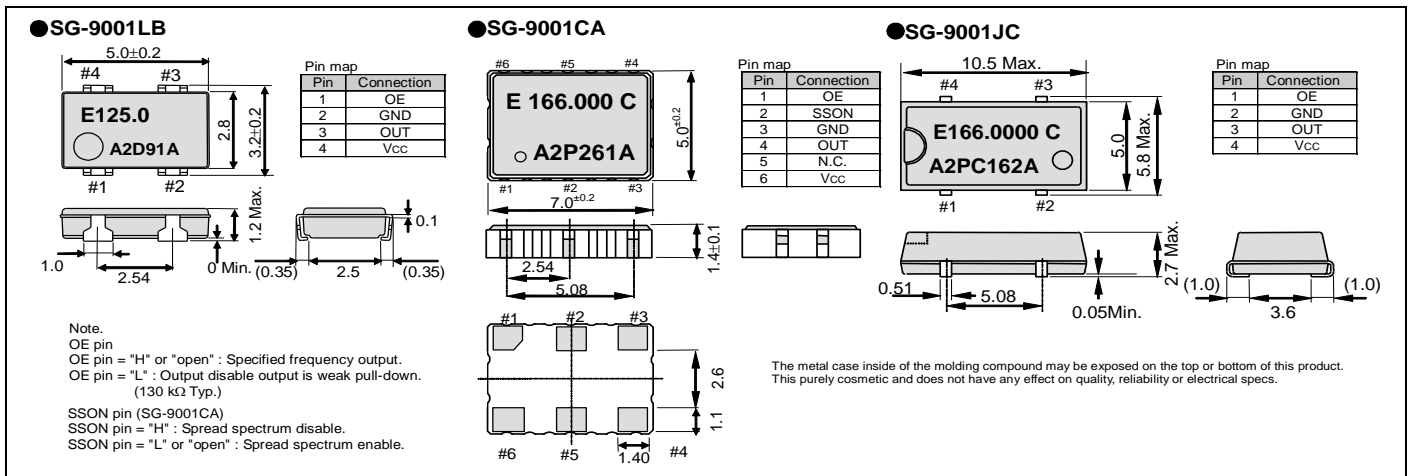
Product Name SG-9001LB 125.000000MHz C 05 P
 (Standard form) ① ② ③ ④ ⑤ ⑥

①Model ②Package type ③Frequency ④Spread Type ⑤Modulated width(code) ⑥Function (P: Output enable)

C: Center Spread	Code	02	05	07	10	15	20
	Percentage	±0.25 %	±0.5 %	±0.75 %	±1.0 %	±1.5 %	±2.0 %
D: Down Spread	Code	05	10	15	20	30	40
	Percentage	-0.5 %	-1.0 %	-1.5 %	-2.0 %	-3.0 %	-4.0 %

External dimensions

(Unit:mm)



Footprint (Recommended)

(Unit:mm)

