

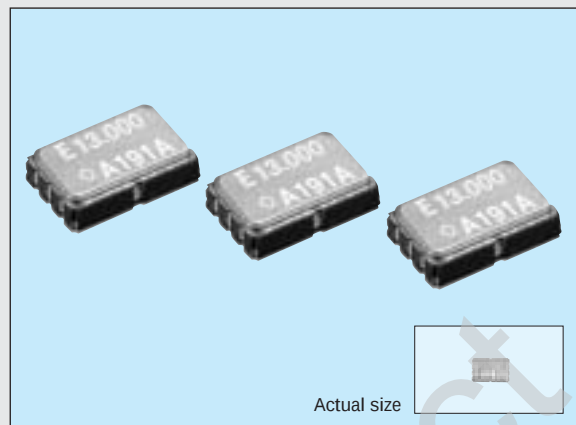
VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR

VG-2820CB

Product number (please refer to page 2)

Q3621CB0xxxxx00

- Developed for GSM.
- Reflowable and high density mounting type ultra small size SMD(5.0x3.2x1.5 mm).
- Using the heat-resisting type AT cut quartz crystal allows almost the same temperature soldering as universal SMD IC.
- Using Bi-CMOS IC allows low current consumption and low noise(-128 dBc/Hz Typ.at 100 Hz offset).
- Operating supply voltage : 2.8 V.



■ Specifications (characteristics)

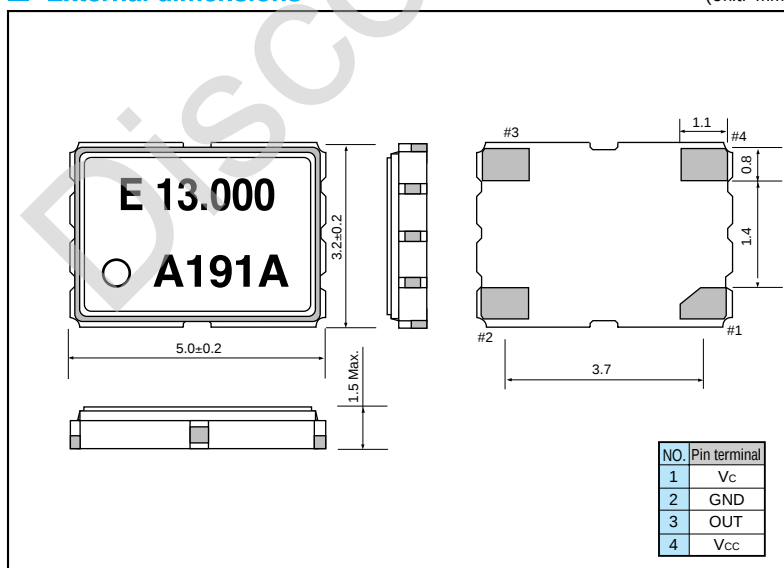
Item	Symbol	Specifications	Remarks
Output frequency	f_0	13.0000 MHz	
Power source voltage	Max. supply voltage	V_{CC-GND}	-0.3 V to +7.0 V
	Operating voltage	V_{CC}	2.8 V ± 0.1 V
Temperature range	Storage temperature	T_{STG}	-40 °C to +85 °C
	Operating temperature	T_{OPR}	-20 °C to +75 °C
Frequency stability	$\Delta f/f_0$	$\pm 12 \times 10^{-6}$ Max. *	
Frequency control range	Δf_c	$\pm 12 \times 10^{-6}$ Min.	$V_c=1.0$ V (center), 0.06 V, 2.0 V
Frequency change polarity		Positive polarity	
Input resistance	Z_{IN}	10 M Ω Min.	V_c-GND (DC)
Current consumption	I_{CC}	1.0 mA Max.	10 k Ω // 10 pF $V_{CC}=2.8$ V
Duty	Duty	30 % to 70 %	GND Level (DC cut)
Output level	V_{OUT}	0.8 V Min.	Peak to Peak
Output load	R_L	9 k Ω to 11 k Ω	Dc cut Capacitor=0.01 pF
	C_L	9 pF to 11 pF	

*Include initial frequency tolerance, reflow shift, temperature variation, supply voltage variation and aging.

Note:Please contact us for requiries about specifications other than the above.

■ External dimensions

(Unit: mm)



■ Recommended soldering pattern

(Unit: mm)

