

VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR (VCXO)

OUTPUT : LV-PECL



Product Number (please contact us)
X1G003691xxxx00

VG-4512CA

- Frequency range : 80 MHz to 200 MHz
- Supply voltage : 3.3 V
- Absolute pull range : 50×10^{-6} , 100×10^{-6}
- External dimensions : $7.0 \times 5.0 \times 1.6$ mm
- Function : Output enable (OE)
Active High or Low
- Output : LV-PECL



Actual size



Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks
Output frequency range	f_o	80.000 MHz to 200.000 MHz	Please contact us about available frequencies.
Supply voltage	V_{cc}	$3.3 \text{ V} \pm 0.165 \text{ V}$	
Storage temperature	T_{stg}	$-55 \text{ }^\circ\text{C}$ to $+125 \text{ }^\circ\text{C}$	Storage as single product.
Operating temperature	T_{use}	G: -40 to $+85 \text{ }^\circ\text{C}$, J: -20 to $+70 \text{ }^\circ\text{C}$, K: 0 to $+70 \text{ }^\circ\text{C}$	
Frequency tolerance	f_{tol}	$\pm 50 \times 10^{-6}$ Max.	Includes frequency aging (20 years)
Current consumption	I_{cc}	60 mA Max.	50Ω
Absolute pull range *1	APR	H: $\pm 100 \times 10^{-6}$ Min., G: $\pm 50 \times 10^{-6}$ Min.	$V_c = 1.65 \text{ V} \pm 1.50 \text{ V}$
Input resistance	R_{in}	100 k Ω Min.	DC level
Frequency change polarity	—	Positive slope	$V_c = 0.15$ to 3.15 V
Symmetry	SYM	45 % to 55 %	$V_{cc} = 1.3 \text{ V}$, $V_c = 1/2 V_{cc}$
Output voltage	V_{OH}	$V_{cc} - 1.1 \text{ V}$ Min.	
	V_{OL}	$V_{cc} - 1.5 \text{ V}$ Max.	
Output load condition (ECL)	L_{ECL}	50Ω	Terminated to $V_{cc} - 2.0 \text{ V}$
Input voltage	V_{IH}	70 % V_{cc} Min.	
	V_{IL}	30 % V_{cc} Max.	
Rise time / Fall time	t_r / t_f	1.0 ns Max.	between 20% and 80% of ($V_{OH} - V_{OL}$)
Start-up time	t_{str}	10 ms Max.	Time at minimum supply voltage to be 0 s
Frequency aging	f_{aging}	This is included frequency tolerance	$+25 \text{ }^\circ\text{C}$, $V_{cc} = 3.3 \text{ V}$, 20 years

*1 Absolute pull range = Frequency control range - Frequency tolerance

* Please keep V_c pin open or ground while powering up V_{cc} .

Product Name VG-4512CA - 155.520000 - G G C T
(Standard form) ① ② ③ ④⑤⑥⑦

①Model ②Package type ③Frequency(MHz) ④Operating temperature ⑤Absolute pull range
⑥Supply voltage (C: 3.3V Typ.) ⑦OE function

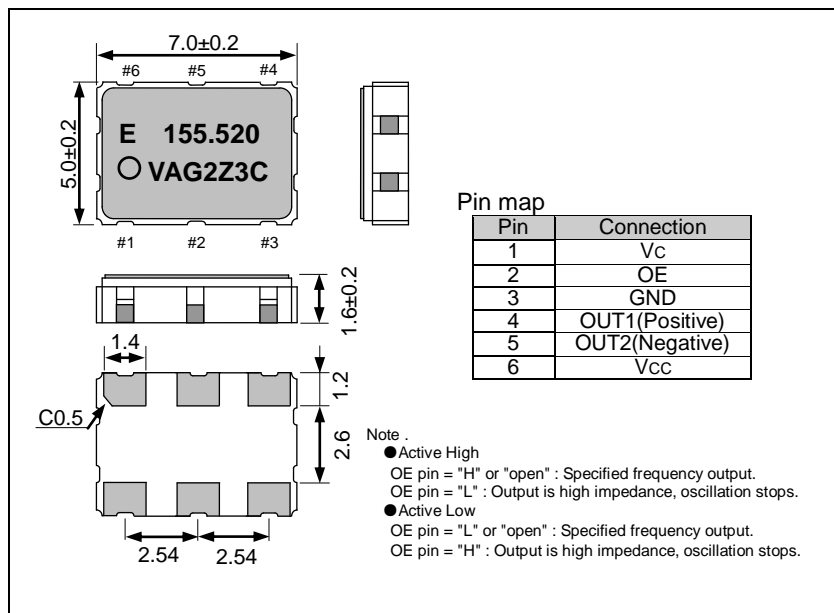
③Operating temperature	
G	-40 to $+85 \text{ }^\circ\text{C}$
J	-20 to $+70 \text{ }^\circ\text{C}$
K	0 to $+70 \text{ }^\circ\text{C}$

⑤Absolute pull range	
H	$\pm 100 \times 10^{-6}$ Min.
G	$\pm 50 \times 10^{-6}$ Min.

⑦OE function	
T	Active High
L	Active Low

External dimensions

(Unit :mm)



Footprint (Recommended)

(Unit :mm)

