



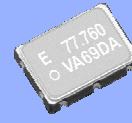
VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR (VCXO)

VG-4512CA

- Frequency range : 70 MHz to 200 MHz LV-PECL
- Supply voltage : 3.3 V
- Absolute pull range : $\pm 50 \times 10^{-6}$, $\pm 100 \times 10^{-6}$
- Thickness : 1.6 mm Typ.
- Function : Output enable(OE)



Product Number (please contact us)



Actual size

**PRELIMINARY****Specifications (characteristics)**

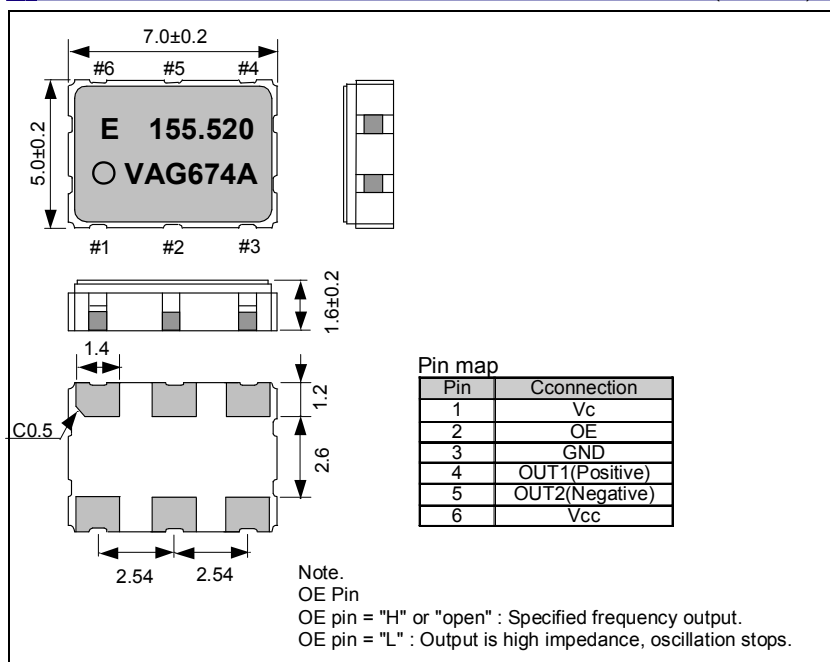
Item	Symbol	Specifications	Remarks
Output frequency range	f_o	70.000 MHz to 200.000 MHz	Please contact us for inquiries regarding available frequencies.
Supply voltage	V _{cc}	3.3 V ± 0.165 V	
Storage temperature range	T _{stg}	-55 °C to +125 °C	Store as bare product after unpacking
Operating temperature range	T _{use}	As per below table.	
Frequency tolerance	f _{tol}	$\pm 50 \times 10^{-6}$ Max.	Includes frequency aging (20 years)
Current consumption	I _{cc}	60 mA Max.	No load condition.
Absolute pull range	APR	GCT: $\pm 50 \times 10^{-6}$ Min. / HCT: $\pm 100 \times 10^{-6}$ Min.	V _c = 1.65 V \pm 1.5 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 %	—
High output voltage	V _{OH}	V _{cc} -1.1 V Min.	—
Low output voltage	V _{OL}	V _{cc} -1.5 V Max.	—
Output load condition (ECL)	L _{ECL}	LV-PECL	
Output enable / disable input voltage	V _{IH}	70 % V _{cc} Min.	V _{IH} or OPEN : Enable
	V _{IL}	30 % V _{cc} Max.	V _{IL} or GND : Disable
Rise time / Fall time	t _r / t _f	1 ns Max.	20 % V _{cc} to 80 % V _{cc} level
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 °C, V _{cc} =3.3 V, 20 years

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

	Operating temperature range
GGCT / GHCT	-40 °C ~ +85 °C
JGCT / JHCT	-20 °C ~ +70 °C
KGCT / KHCT	0 °C ~ +70 °C

External dimensions

(Unit :mm)

**Footprint (Recommended)**

(Unit :mm)

