



### VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR (VCXO)

# VG-4511CA

- Frequency range : 80 MHz to 170 MHz LV-PECL
- Supply voltage : 3.3 V
- Absolute pull range :  $\pm 50 \times 10^{-6}$
- External dimensions : 7.0 x 5.0 x 1.6 t (mm) Typ.
- Function : Output enable(OE)



Product Number (please contact us)  
X1G002781xxxx00



Actual size



### Specifications (characteristics)

Item	Symbol	Specifications	Remarks
Output frequency range	f <sub>o</sub>	80.000 MHz to 170.000 MHz	Please contact us for inquiries regarding available frequencies.
Supply voltage	V <sub>cc</sub>	3.3 V $\pm 0.165$ V	
Storage temperature range	T <sub>stg</sub>	-55 °C to +125 °C	Store as bare product after unpacking
Operating temperature range	T <sub>use</sub>	As per below table.	
Frequency tolerance	f <sub>tol</sub>	$\pm 50 \times 10^{-6}$ Max.	Includes frequency aging (20 years)
Current consumption	I <sub>cc</sub>	70 mA Max.	No load condition.
Absolute pull range	APR	GCT: $\pm 50 \times 10^{-6}$ Min.	V <sub>c</sub> = 1.65 V $\pm 1.5$ V
Input resistance	R <sub>in</sub>	100 k $\Omega$ Min.	DC level
Frequency change polarity	—	Positive slope	V <sub>c</sub> = 0 to 3.3 V
Symmetry	SYM	40 % to 60 %	—
High output voltage	V <sub>OH</sub>	V <sub>cc</sub> -1.1 V Min.	—
Low output voltage	V <sub>OL</sub>	V <sub>cc</sub> -1.5 V Max.	—
Output load condition (ECL)	L <sub>ECL</sub>	LV-PECL	
Output enable / disable input voltage	V <sub>IH</sub>	70 % V <sub>cc</sub> Min.	V <sub>IH</sub> or OPEN : Enable
	V <sub>IL</sub>	30 % V <sub>cc</sub> Max.	V <sub>IL</sub> or GND : Disable
Rise time / Fall time	t <sub>r</sub> / t <sub>f</sub>	1.5 ns Max.	20 % V <sub>cc</sub> to 80 % V <sub>cc</sub> level
Start-up time	t <sub>str</sub>	10 ms Max.	Time at minimum supply voltage to be 0 s
Frequency aging	f <sub>aging</sub>	This is included frequency tolerance	+25 °C, V <sub>cc</sub> =3.3 V, 20 years

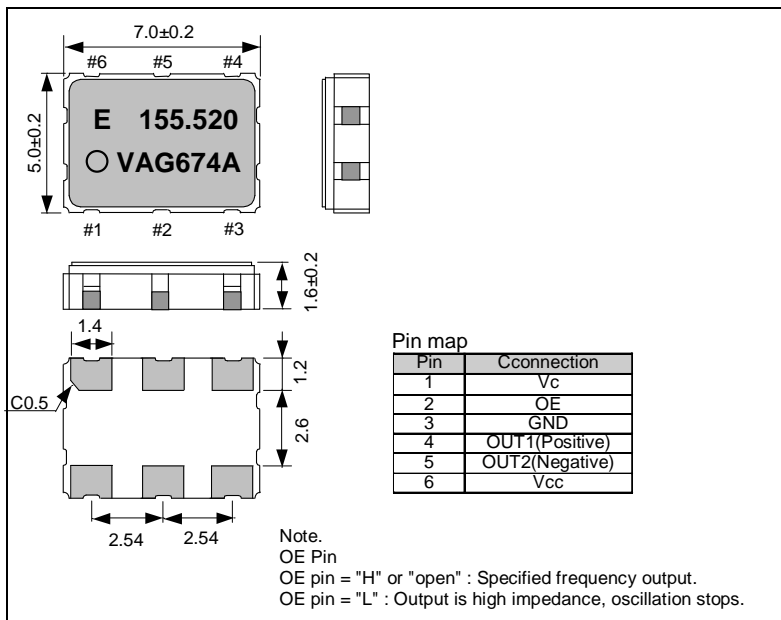
\* Please keep Vc pin open or ground while powering up Vcc.

### Operating temperature range

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

### External dimensions

(Unit : mm)



### Footprint (Recommended)

(Unit : mm)

