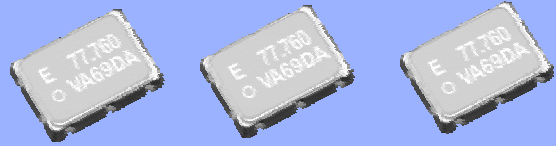


VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR (VCXO)

VG-4501CA

- Frequency range : 60 MHz to 80 MHz
- Supply voltage : 3.3 V
- Absolute pull range : $\pm 50 \times 10^{-6}$
- Thickness : 1.6 mm Typ.
- Function : Output enable(OE)
- Old name : TCO-7116Z1Z4



Actual size



Specifications (characteristics)

Item	Symbol	Specifications	Remarks
Output frequency range	f_o	60.000 MHz to 80.000 MHz	Please contact us for inquiries regarding available frequencies.
Supply voltage	Vcc	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 blow table.	
Frequency tolerance	f_tol(osc)	$\pm 50 \times 10^{-6}$ Max.	-40 °C to +85 °C
Current consumption	Icc	35 mA Max.	No load condition.
Absolute pull range*1	APR	$\pm 50 \times 10^{-6}$ Min.	Vc= 1.65 V \pm 1.65V
Input resistance	Rin	80 k Ω Min.	DC level
Frequency change polarity	—	Positive slope	Vc= 0 to 3.3 V
Symmetry	SYM	45 % to 55 %	50 % Vcc level
High output voltage	VOH	90 % Vcc Min.	IOH= -0.8mA
Low output voltage	VoL	10 % Vcc Max.	IoL= 3.2mA
Output load condition (CMOS)	L_CMOS	15 pF Max.	
Output enable / disable input voltage	VIH	70 % Vcc Min.	VIH or OPEN : Enable
	VIL	30 % Vcc Max.	VIL or GND : Disable
Rise time / Fall time	tr / tf	5 ns Max.	20 % Vcc to 80 % Vcc level
Oscillation start up time	tosc	10 ms Max. *2	Time at minimum supply voltage to be 0 s
Frequency aging	f_aging	This is included Absolute pull range	+25 °C, Vcc=3.3 V, 20 years

*1 Absolute pull range = Frequency control range- (Frequency tolerance + 20 years Aging + Free fall + Vibration)

*2 Rise time (or 3.15 V) of Vcc > 150 μ s

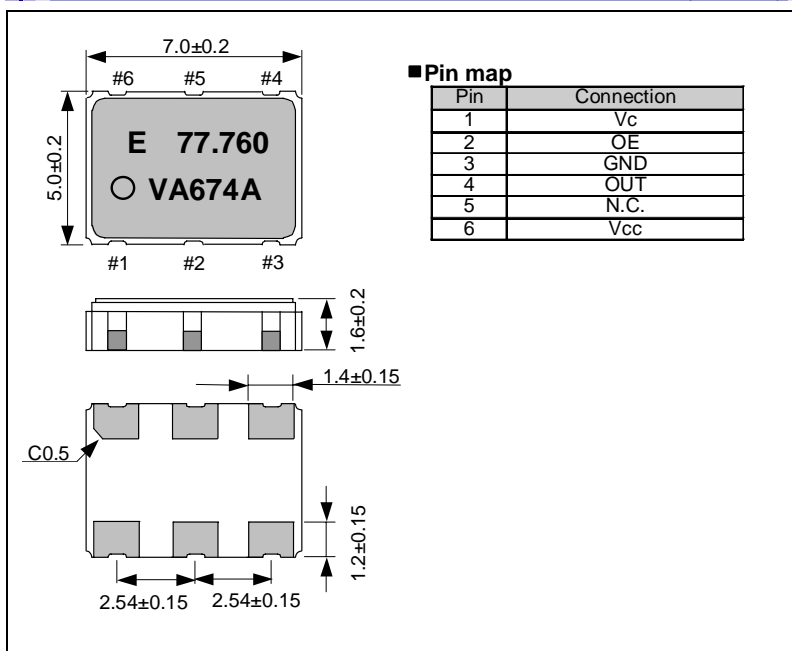
* Please keep Vc pin open or ground while powering up Vcc.

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)

