



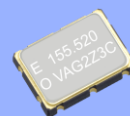
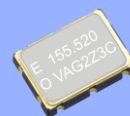
VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR (VCXO)

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



Product Number (please contact us)
X1G002861xxx00



Actual size



Specifications (characteristics)

Item	Symbol	Specifications	Conditions / Remarks
Output frequency range	f_o	80.000 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	T_{stg}	-55 °C to +125 °C	Store as bare product.
Operating temperature	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.	50 Ω
Absolute pull range *1	APR	As per below table.	$V_c = 1.65 \text{ V} \pm 1.50 \text{ V}$
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 %	$V_{cc} = 1.3\text{V}$, $V_c = 1/2V_{cc}$
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}	LV-PECL	
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.	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, $V_{cc} = 3.3 \text{ V}$, 20 years

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

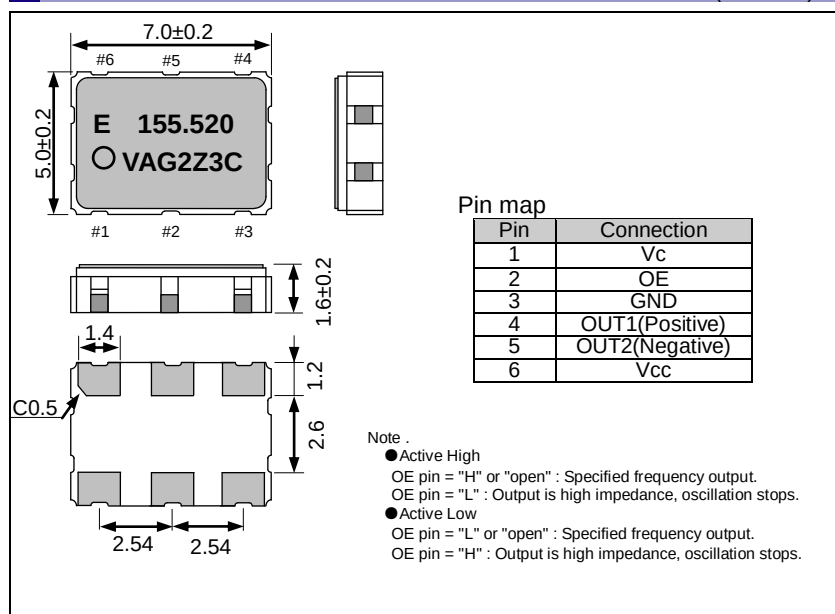
* Please keep V_c pin open or ground while powering up V_{cc} .

Operating temperature range

Operating temperature range	Absolute pull range			
	$\pm 50 \times 10^{-6}$ Min.		$\pm 100 \times 10^{-6}$ Min.	
	Active High	Active Low	Active High	Active Low
G: -40 °C to +85 °C	GGCT	GGCL	GHCT	GHCL
J: -20 °C to +70 °C	JGCT	JGCL	JHCT	JHCL
K: 0 °C to +70 °C	KGCT	KGCL	KHCT	KHCL

External dimensions

(Unit :mm)



Footprint (Recommended)

(Unit :mm)

