



# VOLTAGE CONTROLLED CRYSTAL OSCILLATOR VCX91, VCX92

## Applications

- Set-top Box / MPEG / ADSL / Frequency Transmission

## Features

- Dimensions (7.0 × 5.0 × 1.6)
- Ceramic SMD Package / Seam sealed
- Low control voltage and CMOS Output
- Reflow soldering / Emboss taping / Wide pulling range
- Tri-state Option

## Specifications

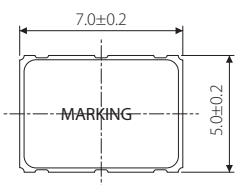


Model		VCX91, VCX92	
Frequency range		1.5 ~ 54 MHz	
Nominal frequency		27.000, 35.328MHz	
Storage temperature range		-40 ~ +85°C	
Operating temperature range		-20 ~ +70°C	
Frequency stability		$\pm 30 \times 10^{-6}$ , $\pm 50 \times 10^{-6}$	
Power supply voltage (Vdd)		+3.3V DC $\pm 10\%$	+5.0V DC $\pm 10\%$
External control function		$\pm 100 \times 10^{-6}$ min. / +1.65V $\pm 1.5$ V DC (<45MHz)	
External control voltage		$\pm 75 \times 10^{-6}$ min. / +1.65V $\pm 1.5$ V DC (45MHz $\leq$ )	
Current consumption		10 mA max. (F $\leq$ 20MHz) 15 mA max. (20-30MHz) 20 mA max. (> 30MHz) 25 mA max. (> 40MHz)	15 mA max. (F $\leq$ 20MHz) 20 mA max. (20-30MHz) 25 mA max. (> 30MHz) 30 mA max. (> 40MHz)
Output	Load	CMOS(15pF)	
	Level	V <sub>OL</sub> : 10%V <sub>DD</sub> max. / V <sub>OH</sub> : 90%V <sub>DD</sub> min.	
	Rise & Fall time	6ns max. / 0.1V <sub>DD</sub> - 0.9V <sub>DD</sub>	
	Duty cycle	45% ~ 55% at 1/2V <sub>DD</sub>	
Phase noise		-130dBc / Hz max. (at 1kHz)	
Tri-state Function / VCX92		#2:N.C. or "H" → Output enable / #2:"L" → Hi-Z (Output disable)	

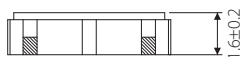
Package quantity: 1,000pcs max./Reel.

## Outline and Dimensions [unit:mm]

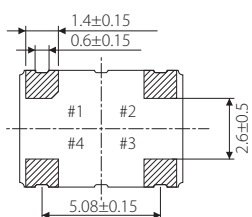
### VCX91



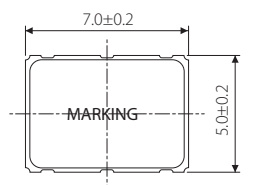
Terminal	Connection
#1	Vcont
#2	GND
#3	OUTPUT
#4	Vdd



Example of a Terminal Land Pattern



### VCX92



Terminal	Connection
#1	Vcont
#2	CE
#3	GND
#4	OUTPUT
#5	N.C.
#6	Vdd



Example of a Terminal Land Pattern

