

VCX61, VCX31, VCX21

VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR

DIP



TYPICAL APPLICATIONS

PLL circuit, AFC circuit, FM modulator

DIMENSION

VCX61: 13.2 x 13.2 x 5.05[mm]
VCX31: 20.8 x 13.2 x 5.05[mm]
VCX21: 20.8 x 13.2 x 8.0[mm]

TYPICAL SPECIFICATIONS

Frequency range	1.000 ~ 49.9 MHz	
Nominal frequency	8.192, 12.288, 16.384, 18.432, 24.576, 32.768, 35.328, 44.736MHz	
Frequency stability	$\pm 50 \times 10^{-6} [\pm 25 \times 10^{-6} \text{ Max}]$	$\pm 50 \times 10^{-6} [\pm 30 \times 10^{-6} \text{ Max}]$
Freq. variable range/control voltage	$\pm 100 \times 10^{-6} \text{ Min.} / +2.5 \pm 2$ $\pm 100 \times 10^{-6} \text{ Min.} / +1.65 \pm 1.65$	
Temperature range(°C)	Operating	-20°C ~ +70°C
	Storage	-40°C ~ +85°C
Power Supply Voltage (Vdd)	+3 ~ +5V ($\pm 5\%$)	
Current consumption	25mA : F $\leq$ 35 MHz 35mA : F > 35MHz	
Output	TTL-CMOS (See Table A)	

TABLE A

Output level		TTL	CMOS
Load		2TTL	15pF
Output voltage	"0" level	VOL : 0.4V Max.	VOL : 0.1 Vdd Max.
	"1" level	VOH : 2.4V Min.	VOH : 0.9Vdd Min.
Rise & fall time		10ns Max (at 0.4~2.4VDC)	10ns Max. (at 10%~90% Vdd)
Symmetry		40~60% at +1.4V	40~60% at 50% Vdd
Phase Noise (at 1.0KHz)			-135 dBc/Hz Max.: F<12MHz" -130 dBc/Hz Max.: 12≤F<20MHz -125 dBc/Hz Max.: 20≤F<40MHz

* Please consult with us for other specification.

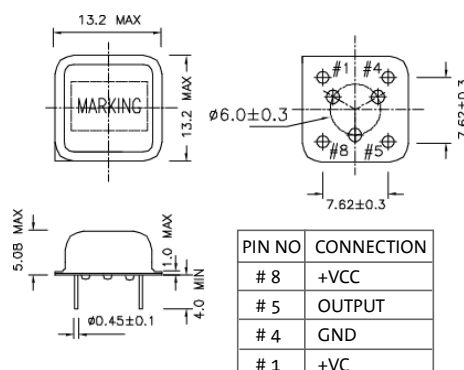
† Vdd: +3.3V

"" Performance vary based on different specification.

OUTLINE DIMENSIONS

Unit:mm

VCX-61



VCX-21, VCX-31

