

## VX7050 (CMOS)

# VX7050



### General description

Ceramic packaged VCXO. Small size. Good mechanical reliability

### Features

Wide pull range and good linearity.  
Excellent low phase noise and jitter.  
Tri-State function available.

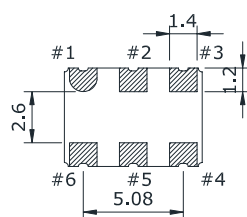
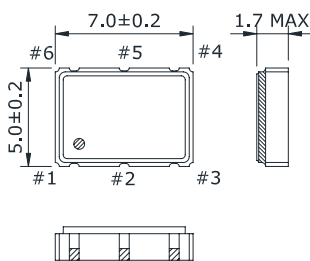
### Main applications

SDH/ SONET, Multimedia, Digital TV, Optical device

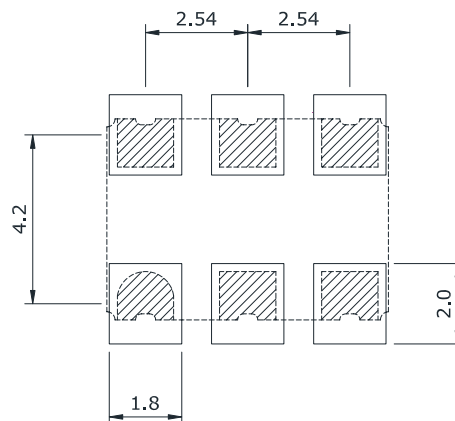
## Electrical characteristics

Item	Values		
Part number	VX7050		
Output Waveform	SQUARED		
Supply voltage	+2.5V	+3.3V	+5.0V
Control Voltage	+1.25V ±1.05V(1.25V)	+1.65V ±1.35V(1.65V)	+2.5V ±2.0V(2.5V)
Frequency range	1-200 MHz	1-200 MHz	1-77.760 MHz
Frequency deviation	±50ppm , ±100ppm , ±150ppm , ±200ppm (only 5V)		
Current consumption	40mA max	50mA max	35mA max
Linearity	10%		
Slope	positive		
Operating temp. range	-20°C / +70°C or -40°C/+85°C or user spec		
Storage temp. range	-55°C / +125°C		
Frequency stability	< ±50ppm or user spec		
Output load	CMOS 15pF		
Duty cycle	40%..60% or 45%..55%		
VOH / VOL	90% Vdd min / 10% Vdd max		
Tr /Tf	10ns or user spec		
Start up time	5ms max		
Aging	< ±3ppm		
Phase jitter (12KHz - 20MHz)	1ps RMS max		
Period jitter (pk-pk)	<25ps max		
Modulation bandwidth	15KHz @ -3dB		

## Dimensions



CONNECTION  
 #1 : V.C  
 #2 : Tri-state or N.C  
 #3 : GND  
 #4 : OUTPUT  
 #5 : Tri-state or N.C  
 #6 : VDD



# VCXO (CMOS)

## VX7050

### Part Number Generator

**VX7050**    **3**    **10**    **A**    **D**    **D**    **10**    **E**    -    **010.000000**    **xxx**  
 0            1            2            3            4            5            6            7                       8            9

**0** : Type  
VX7050

**1** : Vcc  
2 = +2.5V  
3 = +3.3V  
5 = +5.0V

**2** : Stability in temperature  
10 <math>\pm 10\text{ppm}</math>  
15 <math>\pm 15\text{ppm}</math>  
20 <math>\pm 20\text{ppm}</math>  
25 <math>\pm 25\text{ppm}</math>  
30 <math>\pm 30\text{ppm}</math>  
50 <math>\pm 50\text{ppm}</math>

**3** Op. temp. range  
blank = -20/+70  
A = -40/+85

**4** : Duty Cycle  
blank = 40% - 60%  
D = 45% - 55%

**5** : Pulling range  
C >  $\pm 50\text{ppm}$   
D >  $\pm 100\text{ppm}$   
E >  $\pm 150\text{ppm}$   
F >  $\pm 200\text{ppm}$

**6** : Linearity  
5 = 5%  
10 = 10%  
etc

**7** : Option  
blank = no option  
E = Enable / Disable

**8** : Frequency (MHz)  
□□□.□□□□□□  
max 10 digits including comma

**9** : Customized code  
Note : factory use