



actual size

Programmable Oscillator-VX7

Surface Mount Crystal Oscillator – Low Jitter

Features

- fast delivery service
- HCMOS / TTL compatible type
- tristate function or stop function

General Data

type	VX7 3.3 V	VX7 5.0 V
frequency range	1.0 ~ 200.0 MHz	1.0 ~ 200.0 MHz
frequency stability over all (inclusive stability at 25 °C, operating temp. range, input voltage change, aging, shock, vibration)	± 100 ppm ± 50 ppm	± 100 ppm ± 50 ppm
current consumption max.	30 mA at 15 pF 20 mA at 50 pF	50 mA at 15 pF 30 mA at 50 pF
supply voltage	3.3 V ± 10 %	5.0 V ± 10 %
rise & fall time max.	5 ns 1.00 ~ 79.99 MHz 6 ns 80.0 ~ 200.0 MHz	6 ns
output load	15 pF 1.00 ~ 200.0 MHz 50 pF 1.00 ~ 80.00 MHz	15 pF 1.00 ~ 200.0 MHz 50 pF 1.00 ~ 80.00 MHz
output low level	$V_{DC} \times 0.1$	$V_{DC} \times 0.1$
output high level	$V_{DC} \times 0.9$	$V_{DC} \times 0.9$
operating temperature	-10 °C ~ +70 °C / -40 °C ~ +85 °C	-10 °C ~ +70 °C / -40 °C ~ +85 °C
storage temperature	-55 °C ~ +125 °C	-55 °C ~ +125 °C
symmetry at 1/2 V_{DC}	45 / 55 % typical	45 / 55 % typical

Jitter Reference Data

3.3V version, 15 pF

frequency in MHz	1 sigma rms in ps	peak-peak in ps
8.0000	50	200
16.0000	41	160
32.0000	42	170
50.0000	13	70
106.250	27	125
125.000	21	100
155.520	27	130
200.000	40	150

Enable / Disable Function

pin #1	pin #3
open or high	oscillation
gnd or low	high impedance
e/d delay time: 100 ns max.	

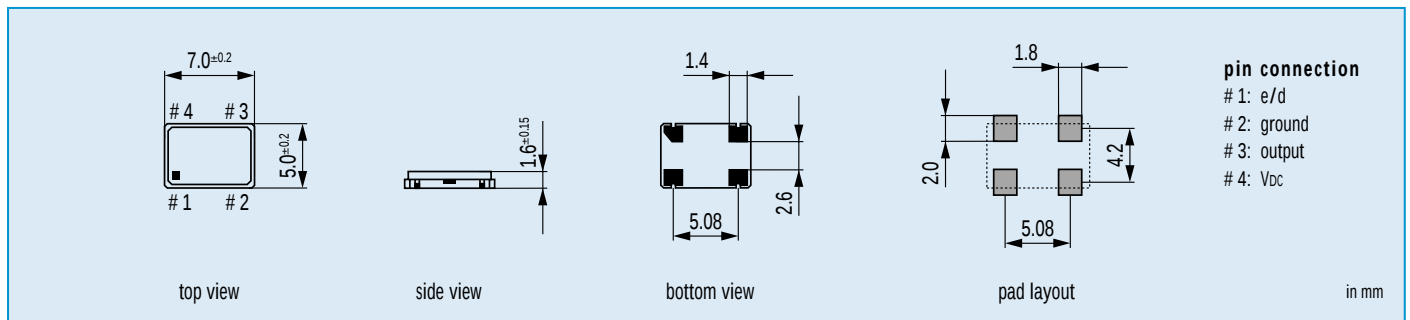
Order Information

O	frequency in MHz	type	frequency stability	supply voltage	output load	option
Oscillator	1.0 ~ 200.0 MHz (15 pF) 1.0 ~ 80.00 MHz (50 pF)	VX7	A = ±100 ppm B = ± 50 ppm	3 = 3.3 V 5 = 5.0 V	1 = 15 pF 3 = 50 pF	blank = -10 °C ~ +70 °C blank = tristate function STP = stop function T1 = -40 °C ~ +85 °C
Example: O 20.0-VX7-B-3-1-T1						

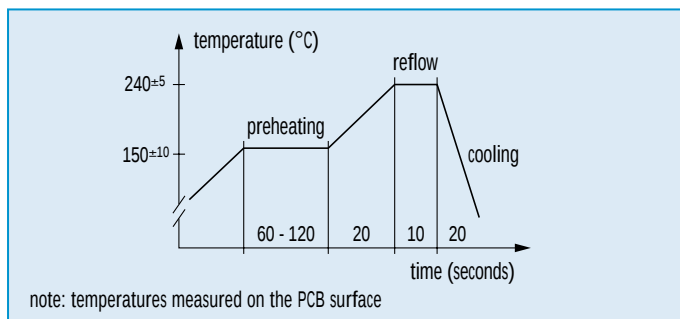


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Dimensions



Reflow Soldering Profile



Environmental Conditions

1. shock: DIN IEC 68-2-27
Test Ea, 100g, 6 ms, half sine wave, 3 bumps in main directions
2. vibration: DIN IEC 68-2-6
Test Fc, 10 ~ 500 Hz, 10g, 2 hours in main directions
3. humidity: DIN IEC 68-2-3
40°C/93% RH for 21 days
4. solderability: CECC 008 02 - 7.2.1 infrared reflow condition