

Features

Operational Voltage: 3.3, 5.0V

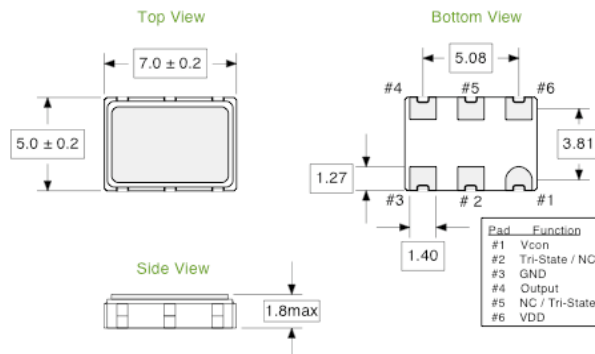
Tight Symmetry (45% – 55%) available

Standard 7.0 x 5.0 x 1.6mm Ceramic SMD package.

Tape & Reel 1,000 / 3,000pcs reel

RoHS Standard Product

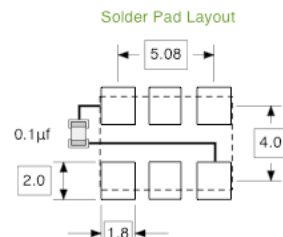
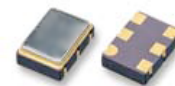
Outlines & Dimensions (mm)



Voltage Controlled Crystal Oscillator (VCXO)

7.0 x 5.0 x 1.6mm (6 Pad) SMD

1.5 – 200MHz



*To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between VDD and GND pads.

Electrical Specifications

Parameter	5.0V		3.3V		Unit
	Min.	Max.	Min.	Max.	
Supply Voltage Variation (VDD) 10%	4.5	5.5	2.97	3.63	V
Frequency Range	1.5	50	1.5	200	MHz
Pulling Range	±100	-	±100	-	ppm
Control Voltage Range	0.5	4.5	0.3	3.0	V
Supply Current					
1.5 MHz ≤ Fo < 20MHz	-	15	-	10	mA
20 MHz ≤ Fo < 50MHz	-	30	-	20	
50 MHz ≤ Fo ≤ 80MHz	-	35	-	30	
80 MHz < Fo < 160MHz	-	-	-	40	
160 MHz ≤ Fo ≤ 200MHz	-	-	-	50	
Output Level (CMOS)					
Output High (Logic "1")	90%	-	90%	-	VDD
Output Low (Logic "0")	-	10%	-	10%	
Transition Time: Rise/Fall Time *					
1.5 MHz ≤ Fo < 20MHz	-	4	-	5	nSec
20 MHz ≤ Fo < 50MHz	-	3	-	4	
50 MHz ≤ Fo ≤ 80MHz	-	2	-	3	
80 MHz < Fo ≤ 200MHz	-	-	-	2	
Start Time	-	5	-	5	mSec
Tri-State (Input to Pin 2 or Pin 5)					
Output Active	0.8	-	0.6	-	VDD
Output in High Impedance State	-	0.16	-	0.15	
Absolute Clock Period Jitter	-	40	-	40	pSec
Linearity	-	10	-	10	%
Modulation Bandwidth (BW)					
1.5 MHz ≤ Fo ≤ 55MHz	20	-	20	-	KHz
55 MHz < Fo ≤ 80MHz	30	-	30	-	
80 MHz < Fo ≤ 200MHz	45	-	45	-	
Input Impedance					
1.5 MHz ≤ Fo < 100MHz	2000	-	2000	-	KΩ
100 MHz ≤ Fo ≤ 200MHz	50	-	50	-	
Aging	-	± 3	-	± 3	ppm
Storage Temp. Range	-55	+125	-55	+125	°C

* Transition times are measured between 10% and 90% of VDD, with an output load of 15pF.

Freq. Stability vs. Temp. Range

Temp (°C)	ppm	± 25	± 50
-10 - +60	S	S	S
-20 - +70	S	S	S
-40 - +85	O	S	S

S = Standard O = Optional X = Not available

* Inclusive of calibration @ 25°C, operating temperature range, input voltage variation, load variation, aging (1st year), shock and vibration.



Specifications subject to change without notice.

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