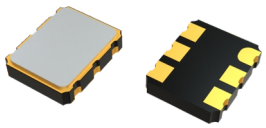
7.0 x 5.0 mm SMD Voltage Controlled Crystal Oscillator

Feature

- Typical 7.0 x 5.0 x 1.75 mm 6 pads ceramic SMD package.
- Tight symmetry (45 to 55%) available.
- Output frequency up to 250 MHz.
- Tri-state enable/disable
- Pb-free/ RoHS compliant



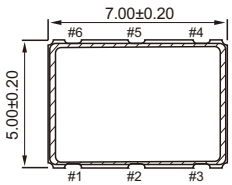
Electrical Specifications

Parameter		2.5V / 3.3V		Unit
		Min.	Max.	
Supply Voltage Variation(VDD)		VDD-5%	VDD+5%	V
Frequency Range		10	250	MHz
Absolute Pulling Range (APR)		±50	-	ppm
Control Voltage Range		0.3	3.0	V
Supply Current	10 MHz≦ Fo ＜160 MHz	-	40	mA
	160 MHz≦ Fo ≦250 MHz	-	50	
Output Level (CMOS)	Output High (Logic"1")	2.97		V
	Output Low (Logic"0")		0.33	
Transition Time (10% ~ 90%) Rise/Fall Time +		-	2	nSec
Start Time		-	2	mSec
Tri-State (input to Pin 2)	Enable	2.31	-	V
	Disable	-	0.99	
Period Jitter (Pk-Pk)		-	150	pSec
RMS Phase Jitter	(Integrated 12kHz~20MHz) (At Integer Mode)	-	1	pSec
Linearity		-	10	%
Modulation Bandwidth (BW)		10	-	kHz
Input Impedance		1000	-	kΩ
Phase Noise@155.52MHz	100 Hz	-75		dBc/Hz
	1 kHz	-105		
	10kHz	-125		
Aging (@ 25℃ 1st year)		-	±3	ppm
Storage Temp. Range		-55	125	℃

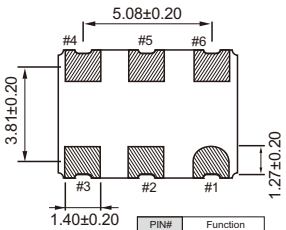
Standard frequencies are frequencies which the crystal has been designed and does not imply a stock position.
+ Transition times are measured between 10% and 90% of V DD , with an output load of 15pF.

Dimension(mm)

TOP VIEW

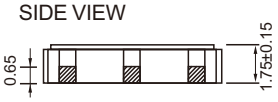


BOTTOM VIEW

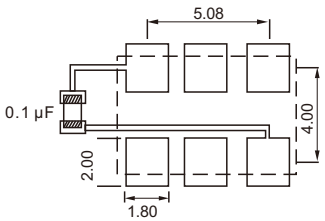


PIN#	Function
1	Vcon
2	Tri-State
3	GND
4	Output
5	NC
6	VDD

SIDE VIEW



Solder Pad Layout(mm)



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

FREQ. STABILITY vs. TEMP. RANGE

ppm / Temp. (℃)	±25	±50
-10 ~ +60	O	O
-20 ~ +70	O	O
-40 ~ +85	△	O

o: Available △:Conditional X: Not available

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